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- 14 THE VIDEOGRAPHER: We're on the record.
- 08:04:42 15 It's 8:04 Pacific Time on August 5th, 2022. This
  - 16 is the deposition of Isabella Leone. We're here in
  - 17 the matter of Facebook Consumer Privacy User
  - 18 Profile Litigation.
  - 19 I'm John Macdonell, the videographer,
- 08:04:58 20 with Veritext.

- 21 Before the reporter swears the witness,
- 22 would counsel please identify themselves, beginning
- 23 with the noticing attorney, please.
- MS. WEAVER: Yes. Good morning.
- 08:05:09 25 This is Lesley Weaver with

- 08:05:10 1 Bleichmar Fonti & Auld on behalf of the plaintiffs.
  - 2 And with me today from my firm are Josh Samra and
  - 3 Angelica Ornelas.
  - 4 MR. BENJAMIN: Good morning.
- 08:05:21 5 I'm Matt Benjamin of
  - 6 Gibson, Dunn & Crutcher on behalf of Meta Facebook
  - 7 and the witness.
  - 8 With me are Martie Kutscher Clark,
  - 9 Naima Farrell, Matt Boungiorno and Phuntso Wangdra,
- 08:05:33 10 also from Gibson Dunn. And Ian Chen from Meta.
  - 11 THE COURT REPORTER: If you could raise
  - 12 your right hand for me, please.
  - THE DEPONENT: (Complies.)
  - 14 THE COURT REPORTER: You do solemnly
- 08:05:39 15 state, under penalty of perjury, that the testimony
  - 16 you are about to give in this deposition shall be
  - 17 the truth, the whole truth and nothing but the

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18 truth?
        19
             THE DEPONENT: I do.
08:05:39 20
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         8
                            ISABELLA LEONE
         9 having been administered an oath, was examined and
08:05:55 10 testified as follows:
        11
        12
                              EXAMINATION
        13 BY MS. WEAVER:
        14 Q. Good morning, Ms. Leone.
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- 08:06:01 15 A. Good morning.
  - 16 Q. Thanks for joining us today.
  - 17 Have -- have you been deposed before?
  - 18 A. I have not.
  - 19 Q. Okay. Well, good -- good times are ahead
- 08:06:12 20 for you.
  - 21 So really briefly, I -- I know that
  - 22 you've covered these rules with your counsel, but
  - 23 it's good if we discuss it on the record.
  - AS you can see, Ms. Romano here is
- 08:06:21 25 transcribing what we discuss today. And so because

- 08:06:28 1 of that transcription process and because we are
  - 2 making a record, it's really important that we not
  - 3 speak over each other and that we answer questions
  - 4 audibly.
- 08:06:38 5 Does that make sense?
  - 6 A. Absolutely.
  - 7 Q. Okay. If you don't understand a question
  - 8 that I'm asking, please just ask for clarity and
  - 9 I'll rephrase it, because the really important
- 08:06:48 10 thing is that we're communicating accurately with
  - 11 one another; is that fair?

- 12 A. Yeah. Absolutely.
- 13 Q. Okay. A general rule is that if there is
- 14 a question pending, you may not take a break, you
- 08:07:04 15 should answer the question. Unless you're
  - 16 instructed not to answer by your counsel.
  - 17 And -- and the final point is that -- I'm
  - 18 sure you've seen courtroom dramas where the witness
  - 19 is on the stand and the judge is making rulings.
- 08:07:20 20 In a deposition, that doesn't happen. So your
  - 21 counsel will be inserting objections for the
  - 22 record, but there will no ruling on them.
  - 23 So you should answer the question, again,
  - 24 unless you are instructed not to answer because we
- 08:07:32 25 are not graced with the presence of a judge saying

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- 08:07:34 1 overruled or sustained, so...
  - 2 Is that fair?
  - 3 A. Yup. Understood.
  - 4 MS. WEAVER: Okay. And before the
- 08:07:43 5 deposition started, your counsel emailed a document
  - 6 over to us today, which we have marked as
  - 7 Exhibit 1.
  - 8 (Exhibit 655 was marked for

- 9 identification by the court reporter and is
- 08:07:53 10 attached hereto.)
  - 11 Q. (By Ms. Weaver) And did you discuss with
  - 12 your counsel how exhibits are marked in these
  - 13 remote kinds of depositions?
  - 14 A. Yes.
- 08:08:00 15 Q. Okay. So do you have Exhibit Share up?
  - 16 A. Uh-huh. Yes, I have it up.
  - 17 Q. And you can see Exhibit 1?
  - 18 A. Yes.
  - 19 Q. Okay. And what is Exhibit 1?
- 08:08:18 20 A. It's a document I put together for how I
  - 21 prepared for today.
  - Q. Okay. And when did you prepare it?
  - 23 A. I summarized this yesterday, this
  - 24 document.
- 08:08:32 25 Q. And were there other underlying notes

- 08:08:35 1 that you used to prepare this?
  - 2 MR. BENJAMIN: Objection to form.
  - THE DEPONENT: It was a summary document
  - 4 so it collated my calendar to get to the -- the
- 08:08:44 5 hours that we looked at.

- 7 what you meant.
- 8 Q. (By Ms. Weaver) No, that's fair. That's
- 9 fine.
- 08:08:53 10 Just trying to understand -- you actually
  - 11 yourself created the document; is that right?
  - 12 A. Yes.
  - 13 Q. Okay. And when you -- you wrote
  - 14 "Approximately 36 hours with counsel."
- 08:09:06 15 Do you see that?
  - 16 A. Yes.
  - 17 Q. Which counsel are you referring to?
  - 18 A. Gibson Dunn. So Matt Benjamin and the
  - 19 broader team.
- 08:09:16 20 Q. And who else other than Mr. Benjamin?
  - 21 A. Martie Phuntso. Matt -- Matt Boungiorno,
  - 22 the other Matt. Rose Ring and Naima Farrell.
  - Q. Okay. And anyone else?
  - 24 A. I don't believe so from the Gibson Dunn
- 08:09:36 25 team. And then Ian Chen, our -- my -- the -- the

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- 08:09:39 1 Meta lawyer who's also on the call.
  - 2 Q. Okay. Did you meet with any other

- 3 lawyers during those 36 hours?
- 4 A. No.
- 08:09:49 5 Q. Okay. Did you meet with any lawyers to
  - 6 prepare at all?
  - 7 A. No, not aside from these lawyers.
  - 8 Q. Okay. Sometimes I'm asking you questions
  - 9 and it may seem curious to you. But again, we're
- 08:10:02 10 laying foundation for a record that I'm just trying
  - 11 to make sure that I'm not missing something.
  - 12 When did you meet with counsel during
  - 13 those 36 hours?
  - 14 A. Those have been divided up over multiple
- 08:10:16 15 weeks. I think originally, towards the end of May,
  - 16 and then sessions over time that varied between an
  - 17 hour and three to four hours long. And I don't
  - 18 remember the exact number of sessions.
  - 19 Q. And during those sessions, did counsel
- 08:10:32 20 provide you with documents?
  - 21 A. We discussed the documents for this
  - 22 deposition. And then as well as documents from my
  - 23 prep, whether that was external -- Facebook
  - 24 documents or documents that -- that we worked
- 08:10:46 25 through about the products or anything relevant.

- 08:10:50 1 Q. And when you say "the external," what did
  - 2 you mean?
  - 3 A. Sorry. I mean, articles such as like our
  - 4 help center or our news blog posts, areas where
- 08:11:01 5 we've discussed our targeting and ranking
  - 6 externally. And then as well as our internal
  - 7 references about those products as well.
  - 8 Q. And when you say "internal references,"
  - 9 what are you referring to?
- 08:11:15 10 A. For example -- I'm trying to think of a
  - 11 good example that makes sense.
  - 12 I -- I'm -- I can double-check. I think
  - 13 we used an internal Wiki, which is kind of like our
  - 14 version of how we -- how -- how our internal, like
- 08:11:41 15 way of documenting for teams to reference.
  - 16 And similar if -- if any internal
  - 17 announcements that were relevant. So I -- I
  - 18 believe looking at like an internal announcement
  - 19 that helps us get our sales teams in -- prepared
- 08:11:58 20 for an external announcement. So that's the --
  - 21 that's an example of -- of an internal document
  - 22 that I looked at.
  - 23 Q. Got it.
  - 24 And for the internal documents, did you

08:12:09 25 provide those to counsel to discuss or did they

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- 08:12:11 1 provide them to you?
  - 2 MR. BENJAMIN: Objection to form.
  - 3 MS. WEAVER: Let me ask differently.
  - 4 Q. (By Ms. Weaver) Did you provide any of
- 08:12:19 5 those internal documents to prepare for your
  - 6 deposition?
  - 7 MR. BENJAMIN: Objection. Form.
  - 8 THE DEPONENT: I'm -- did I provide them
  - 9 to my counsel or in our conversations, or look at
- 08:12:31 10 them during those sessions?
  - I'm not totally sure what you mean.
  - 12 Q. (By Ms. Weaver) Did -- did you yourself
  - 13 identify any internal documents that you used to
  - 14 prepare for this deposition?
- 08:12:46 15 A. Without anyone else? No, I -- I don't
  - 16 think so.
  - 17 Q. Okay. So the materials that you used to
  - 18 prepare were largely, if not exclusively, curated
  - 19 by the attorneys; is that right?
- 08:12:58 20 MR. BENJAMIN: Objection to form.
  - 21 Misstates.

- 22 THE DEPONENT: I -- they weren't
- 23 exclusively from the legal team. They could have
- 24 been from the groups and the people we also worked
- 08:13:13 25 on with my prep, our employees that aren't lawyers.

- 08:13:18 1 Q. (By Ms. Weaver) And did you provide any
  - 2 documents to prepare?
  - 3 MR. BENJAMIN: Objection. Form.
  - 4 THE DEPONENT: I -- I don't believe I
- 08:13:25 5 did, no.
  - 6 Q. (By Ms. Weaver) And how many documents
  - 7 did the team that you met with provide?
  - 8 A. The legal team or when --
  - 9 (Simultaneously speaking.) \*\*\*
- 08:13:36 10 Q. (By Ms. Weaver) The nonlegal --
  - 11 A. The legal team --
  - 12 0. Sorry.
  - 13 A. Go ahead.
  - 14 Q. That's my fault. I apologize.
- 08:13:45 15 How many documents did the nonlegal team
  - 16 identify and provide for you to use in preparation
  - 17 for this deposition?
  - 18 MR. BENJAMIN: Objection. Form. Vague.

- 19 THE DEPONENT: I -- I think -- I can
- 08:14:00 20 think of like one document that -- that one of
  - 21 the -- one of the people I was speaking to
  - 22 referenced, and then I looked for that document.
  - Q. (By Ms. Weaver) And what document was
  - 24 that?
- 08:14:13 25 A. It was one of the sales announcements

- 08:14:14 1 that I referenced ahead of an external
  - 2 announcement.
  - 3 Q. And did you find it useful in terms of
  - 4 preparing for your deposition?
- 08:14:24 5 A. Not particularly, to be honest.
  - 6 Q. And why is that?
  - 7 A. It didn't have -- it -- it didn't really
  - 8 give me the information I was looking for.
  - 9 Q. Okay. And what was the information you
- 08:14:35 10 were looking for?
  - 11 A. I was trying to understand what was an
  - 12 update we made in our targeting tools and it didn't
  - 13 actually describe it particularly in detail. So it
  - 14 was not a very ref- -- helpful reference.
- 08:14:48 15 Q. Got it.

- 16 And what year was the update that you
- 17 were thinking of?
- 18 A. It was --
- MR. BENJAMIN: Objection to form.
- 08:14:57 20 THE DEPONENT: Sorry.
  - 21 MR. BENJAMIN: Sorry, Isabella.
  - 22 Objection. Form.
  - 23 THE DEPONENT: It was 20- -- 2013 or
  - 24 2014.
- 08:15:12 25 Q. (By Ms. Weaver) And did you find the

- 08:15:14 1 answer that you were looking for with regard to
  - 2 this update in 2013 and 2014?
  - 3 A. Yes, I did.
  - 4 MR. BENJAMIN: Objection.
- 08:15:22 5 Q. (By Ms. Weaver) And -- and what was the
  - 6 issue, if you don't mind explaining?
  - 7 A. Yeah, absolutely.
  - 8 We had -- it was actually related to one
  - 9 of the documents you -- you -- that's -- that was
- 08:15:32 10 part of the deposition, the exhibits. It was
  - 11 related to the -- the removal of our reach
  - 12 estimates.

- 13 Q. Okay. We'll return to that in a bit
- 14 because I think what I want to do is try to be a
- 08:15:47 15 little more methodical and talk about definitions,
  - 16 et cetera.
  - 17 Returning back to Exhibit 1 for just a
  - 18 moment, you said -- you wrote here that you spent
  - 19 eight hours preparing on your own; is that right?
- 08:16:01 20 A. Yes.
  - Q. What did you do to prepare on your own?
  - 22 A. I largely reread the documents that were
  - 23 submitted, and then read the -- the -- the
  - 24 documents that the legal team had put together as

08:16:14 25 well.

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- 08:16:14 1 Q. Okay. And when you wrote, "documents
  - 2 from Plaintiffs," did you mean the documents that
  - 3 we identified for the deposition?
  - 4 A. (Deponent nods head.)
- 08:16:26 5 Q. Okay.
  - 6 A. Those as well as just the -- I -- I'm not
  - 7 sure if it make a difference, but the ones
  - 8 specifically I understood like the exhibits for
  - 9 this dep- -- deposition. But then also like the

- 08:16:36 10 notice as well as the scenario documents.
  - 11 Q. Great. Thank you.
  - 12 And when you wrote "blog posts," what
  - 13 were you referring to there?
  - 14 A. Our external blog posts. So on our
- 08:16:50 15 Newsroom any -- any announcement we've made that
  - 16 were relevant.
  - 17 Q. And what did you understand the focus of
  - 18 your testimony to be today, as you were preparing?
  - 19 MR. BENJAMIN: Objection to form.
- 08:17:01 20 And Bella, to the extent that answering
  - 21 that question would require you to disclose any
  - 22 privileged communications or information, I'd just
  - 23 ask you to carve that out of your answer.
  - 24 But to the extent that you can answer
- 08:17:12 25 Ms. Weaver's question without disclosing privileged

- 08:17:14 1 information, you should -- you should do so.
  - THE DEPONENT: I understood --
  - 3 Q. (By Ms. Weaver) Go ahead.
  - 4 A. I understood it to be about our -- our ad
- 08:17:24 5 delivery. So targeting and ranking, and the ways
  - 6 that advertisers can place an ad on Meta.

- 7 Q. Okay. So what do you mean by "ad
- 8 delivery"?
- 9 A. So the way our ad system works is that it
- 08:17:58 10 is based on the choices advertisers make by
  - 11 selecting a desired audience and ad settings to
  - 12 help us understand the setup of their ad. And then
  - 13 there is a secondary step which is about
  - 14 determining from that eligible audience who will
- 08:18:12 15 actually see that ad. That's something we called
  - 16 ranking.
  - 17 That -- the end to end of this system is
  - 18 called ad delivery. So the starting point of an
  - 19 advertiser creating an ad to the end point of
- 08:18:23 20 someone seeing that ad.
  - Q. And what is the time frame that you
  - 22 understand you are testifying to today?
  - 23 MR. BENJAMIN: Objection to form.
  - 24 And same caution, to the extent you can
- 08:18:42 25 answer the question without disclosing privileged

- 08:18:44 1 information or communications, you should do so.
  - 2 THE DEPONENT: I understood it to be
  - 3 between the last 10 and 15 years. Over the course

- 4 of the last 10 to 15 years.
- 08:18:55 5 Q. (By Ms. Weaver) Okay. So 2012 or -- I
  - 6 mean, I'll just -- I'm not -- to be transparent,
  - 7 our class period is 2007 to the present.
  - 8 A. That's what I understood, yes.
  - 9 Q. Okay. Great.
- 08:19:08 10 So in 2007, was Facebook engaged in ad
  - 11 delivery?
  - 12 A. We did show ads in 2007.
  - 13 Q. And how was it accomplished in 2007, and
  - 14 how did it change over time, generally?
- 08:19:26 15 MR. BENJAMIN: Objection to form.
  - 16 Compound. Vague.
  - 17 THE DEPONENT: So advertisers have -- we
  - 18 it's always been that an advertiser could set up an
  - 19 ad and give us the creative of what they wanted to
- 08:19:40 20 run -- or to -- to be for that ad, the content.
  - 21 Over the last 15 years, the system has
  - 22 evolved to both provide additional targeting
  - 23 options to advertisers for their selection, the
  - 24 placement options, the ad ranking, the ad delivery.
- 08:19:59 25 Our machine learning has evolved. So a lot of the

- 08:20:03 1 system has changed over time.
  - 2 I think the fundamental pieces of the
  - 3 advertisers' involvement down to a user seeing the
  - 4 ad somewhere on Facebook have been consistent. And
- 08:20:14 5 then over that same period, we've also updated our
  - 6 transparency tools for users as well as the
  - 7 controls they have for advertising.
  - 8 Q. (By Ms. Weaver) So is it possible for
  - 9 you to just lay out generally a chronology of
- 08:20:30 10 how -- let's carve out for a moment the
  - 11 transparency tools and just talk about ad delivery
  - 12 and how that changed over time at Facebook
  - 13 beginning in 2007.
  - 14 MR. BENJAMIN: Objection to form. Scope.
- 08:20:46 15 THE DEPONENT: I don't think that I can
  - 16 lay out a detailed timeline of like specific years
  - 17 of when machine learning was updated. But I can
  - 18 talk through how that product has evolved, if
  - 19 that's useful.
- 08:20:59 20 Q. (By Ms. Weaver) Great. That would be
  - 21 great.
  - 22 A. So over time you can think of our ad
  - 23 delivery as many models that help us optimize and
  - 24 understand some- -- whether someone would be
- 08:21:13 25 interested in an ad. The way those models function

- 08:21:16 1 is that we incorporate people's activity on the
  - 2 site, people's -- oh -- or -- and then across that
  - 3 timeline, also people's activity off of Facebook to
  - 4 help us understand whether they would be interested
- 08:21:26 5 in an ad.
  - 6 So one of the examples of an update there
  - 7 would be, in 2014, starting to include activity on
  - 8 the website or app to help inform ads. And then
  - 9 there have been smaller iterations about the type
- 08:21:44 10 of models and how those function in ad delivery
  - 11 over those years.
  - 12 Q. In 2007, how did Facebook record users'
  - 13 activity on and off the platform?
  - 14 MR. BENJAMIN: Objection to form.
- 08:21:59 15 Q. (By Ms. Weaver) Or generally the --
  - 16 outside of the class period?
  - 17 MR. BENJAMIN: Objection to form.
  - 18 Sorry. Lesley, would you mind restating
  - 19 the question just so it's clear to all of us.
- - 21 Facebook record users' activity on and off the
  - 22 platform?

- MR. BENJAMIN: Thank you.
- 24 THE DEPONENT: Outside of our ad system?
- 08:22:21 25 Q. (By Ms. Weaver) For -- I'm -- using your

- 08:22:23 1 words, you said that -- well, I'll just say, yes,
  - 2 for use in ads -- in ads advertising, yeah.
  - 3 A. Yeah. So --
  - 4 MR. BENJAMIN: Objection -- objection to
- 08:22:39 5 form.
  - 6 THE DEPONENT: In -- in 2007, we did not
  - 7 use offsite, so -- or what I call offsite -- but
  - 8 activity off of Facebook to inform ads. That was
  - 9 something that was introduced in 2014.
- 08:22:57 10 Prior to that, we used activity on
  - 11 Facebook. So that could be information people
  - 12 provide as part of their profile or the
  - 13 interactions they have on Facebook.
  - 14 For example, like camp page interacting
- 08:23:08 15 with an ad would have informed that. That --
  - 16 that's remained relatively consistent throughout
  - 17 this period.
  - 18 Q. (By Ms. Weaver) And when you say
  - 19 "interacting with an ad," what do you mean?

- 08:23:20 20 A. That could be an ad click or ad comment.
  - 21 O. And just to be specific, when you say
  - 22 "click," you mean -- well, what do you mean by
  - 23 "click"?
  - A. When someone is shown an ad, there is a
- 08:23:36 25 call to action that the advertisers also defines in

- 08:23:39 1 the setup of their ad. That could be something
  - 2 like learn more. And they would go to a website,
  - 3 it could be something looks like page. It could be
  - 4 respond to an event.
- 08:23:51 5 So any number of those call to actions --
  - 6 usually when I say "click," I mean that the person
  - 7 actually took that action. They clicked on the
  - 8 learn more.
  - 9 Q. And, therefore, it's not linked
- 08:24:02 10 excessively to example -- for example, a purchase,
  - 11 right?
  - 12 (Simultaneously speaking.) \*\*\*
  - MR. BENJAMIN: Objection.
  - 14 Q. (By Ms. Weaver) It can be anything?
- 08:24:08 15 MR. BENJAMIN: Objection to form.
  - 16 THE DEPONENT: It is not specifically to

- 17 mean a purchase.
- 18 O. (By Ms. Weaver) And when you said that
- 19 Facebook was recording users' on platform activity,
- 08:24:36 20 where is it recorded?
  - 21 What did you mean by that?
  - MR. BENJAMIN: Objection to form.
  - 23 THE DEPONENT: It is -- in order to run
  - 24 our site, we maintain like a -- we understand that
- 08:24:52 25 the actions people take on the site, and that

- 08:24:55 1 activity is what we then use for ads.
  - Q. (By Ms. Weaver) And how is that activity
  - 3 identified and then used for ads?
  - 4 MR. BENJAMIN: Objection to form.
- 08:25:10 5 Compound. Vague.
  - 6 THE DEPONENT: Can -- do you mind
  - 7 clarifying what you mean by "identified"?
  - 8 Q. (By Ms. Weaver) Sure.
  - 9 If Facebook User A is acting on the
- 08:25:23 10 platform, how does Facebook -- and let's say in the
  - 11 period 2007 to 2014 -- how did Facebook identify
  - 12 which activity to observe and record for use in
  - 13 ads?

- 14 MR. BENJAMIN: Objection to form. Vague.
- 08:25:41 15 Calls for speculation.
  - 16 THE DEPONENT: I think it wasn't that
  - 17 something was recorded specifically for the use in
  - 18 ads.
  - 19 So as an example, if I liked a page, we
- 08:25:54 20 would know that I liked a page. And that was
  - 21 because also I have -- when I go to my profile, I
  - 22 need to see that I liked that page. That's
  - 23 something that happens outside of ads completely.
  - 24 Ads then -- our ad system can then use
- 08:26:09 25 that activity in order to help inform my future ads

- 08:26:13 1 by understanding what my interests might be.
  - 2 The -- does that get at what you were
  - 3 asking?
  - 4 Q. (By Ms. Weaver) Yes.
- 08:26:23 5 So when Facebook is using that activity,
  - 6 was Facebook looking at whether or not that
  - 7 activity was marked private or public by the user?
  - 8 MR. BENJAMIN: Objection to form. Scope.
  - 9 THE DEPONENT: No. Activity on Facebook
- 08:26:45 10 is we -- it's not quite differentiated in those two

- 11 buckets. And our -- we did not reference that
- 12 explicitly in use for ads.
- Q. (By Ms. Weaver) So if I mark -- let's
- 14 say I liked a product, but only a restricted
- 08:27:07 15 audience had access to that like, did Facebook then
  - 16 restrict the use of that like in advertising only
  - 17 in relation to the people with whom I had shared
  - 18 that like?
  - 19 MR. BENJAMIN: Objection. Vague. Time
- 08:27:25 20 period.
  - 21 THE DEPONENT: I think there are a few
  - 22 things that I -- to -- to unpack there.
  - 23 So a product, which I understand to mean
  - 24 maybe something that a brand has posted, would be
- 08:27:38 25 from like a Facebook page. Those are public.

- 08:27:41 1 There is only one setting for that -- that post.
  - 2 And so when a user likes it, it is a public action
  - 3 they are taking, and then we would use that for
  - 4 ads.
- 08:27:49 5 I'm not sure if that gets to -- to the
  - 6 example you gave.
  - 7 Q. (By Ms. Weaver) Right. That's -- so

- 8 that's one scenario. But let's assume a scenario
- 9 where a friend posts something on the wall and I
- 08:28:00 10 like it. And that like indicates something about
  - 11 me.
  - 12 Does Facebook use that like to decide how
  - 13 to target me for ads?
  - 14 MR. BENJAMIN: Objection. Form. Vague.
- 08:28:14 15 Calls for speculation.
  - 16 THE DEPONENT: We use people's activity
  - 17 and it could include activity from liking a post.
  - 18 It's not that we then target an ad to someone based
  - 19 on that. It is still based on the advertiser's
- 08:28:27 20 desired audience.
  - 21 So the way they've set up the parameters
  - 22 for their audience. And then the information of
  - 23 people's activity helps us understand if they would
  - 24 be interested in an ad.
- 08:28:38 25 Q. (By Ms. Weaver) When Facebook is using a

- 08:28:39 1 user's activity to identify advertiser's desired
  - 2 audiences, is Facebook limiting users' activity
  - 3 that is public, or is it also using activity
  - 4 that -- for which users have restricted the

- 08:29:00 5 audience?
  - 6 MR. BENJAMIN: Objection. Form. Vague.
  - 7 THE DEPONENT: I -- today, I do not
  - 8 believe that we use the -- actually, there's a
  - 9 clarification here that's important.
- 08:29:20 10 We use people's activity not just in
  - 11 terms of like they -- the exact action they took,
  - 12 but also aggregated. So the fact that you were
  - 13 active on Facebook in the last month is something
  - 14 that we would understand and use in order to inform
- 08:29:37 15 an ad.
  - 16 There isn't a distinction there of
  - 17 whether or not that activity -- the fact that you
  - 18 were active in the last month is public or private.
  - 19 So I -- I'm not sure that there's a clear way to
- 08:29:47 20 answer what you're getting at.
  - Q. (By Ms. Weaver) So for aggregated
  - 22 activity, there's no distinction between public and
  - 23 private. And public and private access --
  - 24 activities are all in one bucket; is that fair?
- 08:30:01 25 MR. BENJAMIN: Objection. Form.

- THE DEPONENT: There are -- our -- the
- 3 way people interact with the platform and -- and
- 4 what they do on the platform does not fall into
- 08:30:17 5 buckets of private and public. And.
  - 6 So all -- also, when we think of like if
  - 7 you've been active in the last month, it doesn't
  - 8 differentiate between those because they're not a
  - 9 concept within the activity on our platform.
- 08:30:29 10 Q. (By Ms. Weaver) So in 2014 -- let's use
  - 11 the not aggregated example.
  - 12 In 2014, when a user engaged in a
  - 13 specific activity and that activity was designated
  - 14 for a restricted audience, meaning something less
- 08:30:51 15 than public, did Facebook use that activity to help
  - 16 curate audiences for advertiser?
  - 17 MR. BENJAMIN: Objection form.
  - 18 THE DEPONENT: It's not that curating
  - 19 can -- curating audiences for advertisers, I'm not
- 08:31:14 20 really sure exactly what that means.
  - 21 If it's that we have a targeting option
  - 22 and an advertiser has defined their target audience
  - 23 and then in order to deliver that ad, we use
  - 24 people's activity, and it's not differentiated
- 08:31:30 25 between public or private.

- 08:31:34 1 Q. (By Ms. Weaver) And is that true for the
  - 2 entire class period, 2007 to the present?
  - 3 A. I'm not sure if there have been
  - 4 carve-outs in some manner throughout that. I
- 08:31:48 5 think -- in -- in a way that maps to private or
  - 6 public. Because, again, it -- it's not really
  - 7 what -- reflective of our system works.
  - 8 Q. And when you say "It's not reflective of
  - 9 how our system works," can you describe what you
- 08:32:01 10 mean, or can you kind of explain what you mean?
  - 11 A. Yes. So something such as liking a page,
  - 12 I think, is what you're referencing as public.
  - 13 Other areas -- things like looking at an ad or
  - 14 watching or -- or -- or looking at a photo, those
- 08:32:19 15 are activity.
  - 16 I'm not sure how we would designate those
  - 17 as public or private because it's not something
  - 18 that's -- necessarily has a trace that leaves
  - 19 behind. It's something that is activity that is on
- 08:32:30 20 our platform. Those are interactions, even if it
  - 21 isn't a like or a comment.
  - 22 O. And are all of those interactions used in
  - 23 some form for advertising?

24 MR. BENJAMIN: Objection.

08:32:44 25 THE DEPONENT: No.

26

- 08:32:44 1 MR. BENJAMIN: Form.
  - Q. (By Ms. Weaver) What are the forms that
  - 3 are used -- what are the activities that are used
  - 4 for advertising?
- 08:32:51 5 A. We use \*\* Lark -- page and ad engagement.
  - 6 So the interactions I was talking about before. We
  - 7 use whether -- how someone has interacted with our
  - 8 products. For example, how they connect to
  - 9 Facebook. And if they're using browser or mobile
- 08:33:08 10 and that -- that type of information. We use
  - 11 information they provide on their profile.
  - 12 And then like I was saying, the -- the
  - 13 more aggregated statistics of have -- have they
  - 14 logged in the last month. Are they an active page
- 08:33:26 15 user. Are they -- those are examples.
  - 16 Q. Does Facebook use, for example,
  - 17 information about likes that users post for
  - 18 advertising?
  - 19 A. Can you clarify --
- 08:33:46 20 MR. BENJAMIN: Objection.

- Q. (By Ms. Weaver) Do you know what a like
- 22 is?
- 23 A. Yes. I -- I'm not sure what you mean by
- 24 information about a like. Just that a like
- 08:33:57 25 occurred?

- 08:33:57 1 Q. Sure.
  - 2 A. We --
  - 3 Q. Does Facebook use likes for advertising?
  - 4 A. Yes, we do. As an example, page likes
- 08:34:04 5 would be something that we use. An ad like would
  - 6 be also another example.
  - 7 Q. Does Facebook use likes on other content
  - 8 for advertising?
  - 9 A. Yes. I don't think that it is like all
- 08:34:23 10 likes. But I'm not sure that there is a click or
  - 11 differentiation of what has been in the system over
  - 12 the entire -- from 2007 until to now -- now.
  - 13 Q. Did Facebook's policy or practices change
  - 14 with regard to which likes it uses for advertising
- 08:34:40 15 over time?
  - 16 MR. BENJAMIN: Objection to form and
  - 17 scope.

- 18 THE DEPONENT: I -- what -- for -- I
- 19 don't think that there were like rules that have
- 08:34:53 20 been changed. That -- that's not something I
  - 21 recall.
  - Q. (By Ms. Weaver) So if a friend wrote a
  - 23 post and I liked it, would that be used for
  - 24 advertising at Facebook?
- 08:35:12 25 A. That -- that example would not be used.

- 08:35:14 1 Q. Why not?
  - A. Honestly, I think we have found that the
  - 3 page and ad engagement, which was the center of all
  - 4 of this, and activity we used up until that -- up
- 08:35:27 5 until the -- besides that piece, has been helpful
  - 6 for understanding people's interests and that
  - 7 wasn't something that was included.
  - 8 Q. And when you say "advertising," what do
  - 9 vou mean?
- 08:35:45 10 A. I mean specifically an ad that has been
  - 11 created by an advertiser and placed through our ad
  - 12 creation tool, such as ads manager, with a desired
  - 13 audience and a bid. And then that they pay for the
  - 14 placement of that ad. So when we show that ad,

- 08:36:03 15 they pay for that impression.
  - 16 Q. I would -- I'm trying to understand what
  - 17 is excluded by your definition of "advertising" in
  - 18 term of ways that Facebook is compensated for
  - 19 allowing the targeting of users.
- 08:36:22 20 Are there examples of ways in which
  - 21 Facebook shares information about users that you
  - 22 think is excluded from the definition of
  - 23 advertising?
  - 24 MR. BENJAMIN: Objection to form.
- 08:36:38 25 Argumentative. Vague.

- 08:36:43 1 THE DEPONENT: So my definition is
  - 2 specifically about the -- what -- what is like paid
  - 3 advertising. I don't -- I'm not quite sure what
  - 4 you mean in terms of other ways people could access
- 08:36:56 5 information. I'm happy to -- to understand that
  - 6 better.
  - 7 Q. (By Ms. Weaver) Okay. So you're
  - 8 excluding, for example, research from advertising;
  - 9 is that an example of something you're excluding?
- 08:37:07 10 MR. BENJAMIN: Objection to form.
  - 11 Misstates. Argumentative.

- 12 THE DEPONENT: Do you mean research such
- 13 as someone -- I'm -- I'm not -- I'm not actually
- 14 sure what you mean by that.
- 08:37:18 15 What would be an example?
  - 16 Q. (By Ms. Weaver) Is there a research
  - 17 department at Facebook?
  - 18 A. We do have an internal --
  - 19 MR. BENJAMIN: Objection to form.
- 08:37:25 20 Objection to form and scope.
  - 21 THE DEPONENT: We --
  - MR. BENJAMIN: You can answer.
  - 23 THE DEPONENT: We do have an internal
  - 24 research department, yes.
- 08:37:31 25 Q. (By Ms. Weaver) And are you excluding

- 08:37:33 1 from your definition of advertising the way that --
  - 2 that research department might use information
  - 3 about users, in your discussion today?
  - 4 A. Yes. I --
- 08:37:45 5 MR. BENJAMIN: Objection to form.
  - 6 Objection to form and scope.
  - 7 THE DEPONENT: Yes, I am. But I'm not
  - 8 sure I understand how our internal research

- 9 department is related to an -- an -- a nonMeta
- 08:37:59 10 advertiser either.
  - 11 Q. (By Ms. Weaver) Right. Okay. I'm just
  - 12 trying to understand if there are certain ways in
  - 13 which information about users is recorded by
  - 14 Facebook and still shared, but that is excluded
- 08:38:13 15 from your definition -- definition of advertising?
  - 16 A. I wouldn't consider our internal --
  - 17 internal research department sharing information.
  - 18 It is -- they are a part of Meta.
  - 19 Q. Okay. And you're not capable of
- 08:38:34 20 testifying about the research department; is that
  - 21 right?
  - 22 MR. BENJAMIN: Objection to form. The
  - 23 characterization. And also to note that the scope
  - 24 of the deposition was the subject of numerous
- 08:38:44 25 meet-and-confers and correspondence between --

- 08:38:46 1 (Simultaneously speaking.) \*\*\*
  - MS. WEAVER: I just asked for an answer.
  - 3 THE DEPONENT: That's correct. I'm not
  - 4 an expert on the research department or the breadth
- 08:38:54 5 of research that we do and don't do.

- 6 Q. (By Ms. Weaver) Got it.
- 7 So you've defined advertising as when an
- 8 ad is created by an advertiser and placed through
- 9 our ad creation tool, such as ads manager.
- 08:39:28 10 If an ad is not created by the
  - 11 advertiser, does Facebook itself create ads?
  - 12 A. We do not create ads for a third party.
  - 13 We -- we do -- we are also an advertiser on our own
  - 14 platform. And then we also use our creation tools
- 08:39:47 15 to create that ad.
  - 16 Q. And are you testifying on that topic
  - 17 today?
  - 18 A. About our -- our own ads?
  - 19 Q. Yes.
- 08:40:01 20 A. To the extent that it relates to our
  - 21 targeting and ad delivery, yes, because it's the
  - 22 same system. In terms of like our marketing
  - 23 efforts, probably not. No, I don't think I'm an
  - 24 expert on that.
- 08:40:14 25 Q. Okay. And you also said you were

- 08:40:21 1 limiting advertising -- and I'm just trying to
  - 2 parse it out -- to "an ad is created by an

- 3 advertiser and placed through our ad creation
- 4 tool."
- 08:40:31 5 So are you excluding examples where the
  - 6 ad is not placed through the ad creation tool or is
  - 7 that just part of -- in your process?
  - 8 A. That's just part of the process. It's
  - 9 not an exclusion. There aren't -- it's not a way
- 08:40:46 10 to exclude other ads.
  - 11 Q. Okay. And then you said they pay for the
  - 12 placement of that ad, or they pay for an
  - 13 impression; is that right?
  - 14 A. Yes.
- 08:41:00 15 Q. Okay. Is that the only thing that third
  - 16 parties pay Facebook for with regard to
  - 17 advertising?
  - 18 MR. BENJAMIN: Objection to form.
  - 19 THE DEPONENT: Do you mean in terms of --
- 08:41:19 20 of an ad that they've tried to create and deliver.
  - Q. (By Ms. Weaver) Yes.
  - 22 A. Yes. Is -- they pay for the impression
  - 23 delivered or -- or the -- the fact that we have
  - 24 shown that ad to someone is -- is what an
- 08:41:34 25 advertiser is paying for.

- 08:41:39 1 Q. Is it fair to say that different metrics
  - 2 can be established for purposes of triggering
  - 3 payment in an agreement with an advertiser?
  - 4 A. I'm not sure what you mean. Do you mind
- 08:41:53 5 clarifying.
  - 6 Q. Do advertiser pay for -- can they agree
  - 7 to pay for views or impressions or clicks, or some
  - 8 other metric?
  - 9 A. They -- they choose the objective of
- 08:42:04 10 their ad, and that is part of what defines -- what
  - 11 their -- the action that they're effectively paying
  - 12 for. So you can -- when -- when they choose that
  - 13 objective, there's -- there are various options.
  - 14 One of them might be people's clicks and views. So
- 08:42:24 15 if like a reach or brand awareness would probably
  - 16 be looking for views. And those are the actions
  - 17 that take.
  - 18 The -- when -- when someone sets up their
  - 19 ads -- their ad, they are given the option --
- 08:42:38 20 look -- I said to set their objective and their
  - 21 bid. And then that helps determine the payment
  - 22 when the ad is actually shown and that action is
  - 23 taken.
  - Q. Okay. If we can, I'd like to break down

08:42:51 25 some of the definitions here, just to back it up a

34

- 08:42:53 1 little bit.
  - 2 So could you identify the general buckets
  - 3 of actions taken for which Facebook receives
  - 4 payment from advertisers?
- 08:43:06 5 MR. BENJAMIN: Objection to form.
  - 6 THE DEPONENT: Actions taken by -- by
  - 7 people viewing the ad or by the advertiser?
  - 8 I'm sorry.
  - 9 Q. (By Ms. Weaver) By the users.
- 08:43:16 10 A. So I believe that payment -- so --
  - 11 viewing an ad is what we charge an advertiser for.
  - 12 It is the impression. There are ways to cut the
  - 13 cost that helps an advertiser understand whether it
  - 14 was the -- what the -- the cost per action
- 08:43:41 15 was.
  - So for example, if we show an ad 100
  - 17 times, there will be a cost per impression. If
  - 18 we -- that ad was only clicked 20 times, there will
  - 19 be a cost per click.
- 08:43:54 20 Those are the -- the breakdown of
  - 21 the payments that the advertiser is then invoiced

- 22 and that they make to us is based on the
- 23 performance of that ad.
- Q. And when you say "view," what do you

08:44:09 25 mean?

35

- 08:44:11 1 A. If I'm going through my newsfeed and I
  - 2 see an ad as a user, that is an impression. It's
  - 3 a -- or a view, sorry -- view is probably more
  - 4 colloquial. But it is the impression of me seeing
- 08:44:24 5 the ad.
  - 6 Q. And how does Facebook know that a user
  - 7 saw the ad?
  - 8 A. Because we know that a user is on
  - 9 Facebook, and they are scrolling through their
- 08:44:35 10 newsfeed.
  - 11 Q. And is Facebook then recording
  - 12 specifically what each user views?
  - 13 A. We do know what people view.
  - 14 Q. And does Facebook record that so it can
- 08:44:51 15 record it to the third party for payment purposes?
  - 16 MR. BENJAMIN: Objection to form.
  - 17 THE DEPONENT: I'm not sure if -- can you
  - 18 walk me through -- maybe "record" is throwing me

- 19 here. And what --
- 08:45:04 20 Q. (By Ms. Weaver) Okay.
  - 21 A. -- do you mean by report back to the
  - 22 advertiser?
  - Q. I'm using "record" because you used
  - 24 record.
- 08:45:10 25 A. Okay.

- 08:45:11 1 Q. What did you mean by "record" when you
  - 2 used it?
  - 3 A. Just that it is logged. So we have --
  - 4 when someone goes in their newsfeed and they see a
- 08:45:20 5 ad, we know that they saw an ad. We do use that to
  - 6 say one person saw this ad. And when we share
  - 7 information back to the advertiser, we share
  - 8 aggregated reporting information so they would know
  - 9 in aggregate how many people saw an ad. We don't
- 08:45:37 10 share that "I, Bella, saw the ad."
  - 11 Q. But in its base, Facebook must have a
  - 12 record that you, Bella, saw the ad because somehow
  - 13 you've got to aggregate, right?
  - 14 A. Yes. We do know that I saw the ad. But
- 08:45:56 15 we don't share that with the advertiser.

- 16 Q. Did that change over time?
- 17 A. No, not to my knowledge.
- 18 Q. Okay.
- 19 A. Sorry, Matt.
- 08:46:05 20 Q. So from 2007 to the present, did Facebook
  - 21 at any point in time share with advertisers who
  - 22 specifically saw what ad?
  - 23 A. Our performance and reporting to
  - 24 advertisers is aggregated. And it explains the
- 08:46:20 25 performance of their ads, not the people who saw

- 08:46:22 1 their ads. And that's been consistent.
  - Q. And has it -- the size of the aggregated
  - 3 groups that Facebook reported to advertisers
  - 4 changed over time?
- 08:46:47 5 A. I -- I would assume it has. I don't know
  - 6 what that timeline looks like or the -- the
  - 7 changes, specifically.
  - 8 Q. In general, is it fair to say that the
  - 9 groups have gotten larger in part as an attempt to
- 08:47:06 10 protect the identification and re-identification of
  - 11 users, when reporting to advertisers who has seen
  - 12 what advertisement?

- MR. BENJAMIN: Objection to form.
- 14 THE DEPONENT: Again, I don't know
- 08:47:19 15 exactly what those changes are or the trend in --
  - 16 to -- to confirm that.
  - 17 Q. (By Ms. Weaver) Did Facebook have a
  - 18 policy about that?
  - MR. BENJAMIN: Objection to form.
- 08:47:33 20 THE DEPONENT: I don't think that there's
  - 21 been an explicit consistent policy about that, in
  - 22 terms of -- over the entire period.
  - Q. (By Ms. Weaver) Are you aware of any
  - 24 policies that relate to it during any time period?
- 08:47:52 25 MR. BENJAMIN: Objection to form. Scope.

- 08:47:55 1 THE DEPONENT: For ads, we -- we do
  - 2 aggregate. I don't think that -- or I'm not aware
  - 3 of a -- a one threshold that is -- that happens
  - 4 throughout.
- 08:48:09 5 I think that those are evaluations with
  - 6 the privacy and policy and legal teams that help
  - 7 establish it for that product and what makes sense
  - 8 in terms of potential re-identification or not.
  - 9 Q. (By Ms. Weaver) Who on those teams is

- 08:48:24 10 knowledgeable about this topic?
  - 11 A. I would expect our privacy team would be
  - 12 and I -- I don't have a name off the top of my
  - 13 head.
  - 14 Q. Okay. If you think of a name during the
- 08:48:38 15 course of the deposition, will you circle back?
  - 16 A. Yeah.
  - 17 Q. Thank you.
  - 18 When you say "that product" -- you said
  - 19 the privacy and legal team establish a threshold
- 08:48:56 20 for that product, what did you mean by "product,"
  - 21 in general?
  - 22 A. Yes. Sorry. That was very internal
  - 23 speak.
  - 24 That would be, as an example, something
- 08:49:06 25 that I consider a product or our targeting options.

- 08:49:10 1 So one of those options could be a product.
  - 2 In this case, I was thinking more
  - 3 specifically about our ad reporting UI and the --
  - 4 the metrics that we provide there as a product.
- 08:49:24 5 Q. When you said "ad reporting UI," you mean
  - 6 ad reporting user interface; is that right?

- 7 A. As an advertiser, when I create the ad in
- 8 ads manager, as an example, the interface that I go
- 9 back to, to understand how that ad is performing.
- 08:49:40 10 Q. And what metrics are you referring to
  - 11 when you said the metrics we provide is a product
  - 12 in the UI?
  - A. So as an example, the number of
  - 14 impressions an ad has received. The number of
- 08:49:54 15 clicks it's received.
  - 16 Q. And to return a little bit to where we
  - 17 are and just close it out.
  - 18 Are there any other metrics that Facebook
  - 19 reports to advertisers?
- 08:50:08 20 A. Outside of performance metrics?
  - 21 Q. Yes.
  - MR. BENJAMIN: Objection to form.
  - THE DEPONENT: No.
  - Q. (By Ms. Weaver) And over the class
- 08:50:18 25 period, is that true as well?

- 08:50:24 1 MR. BENJAMIN: Objection. Form.
  - 2 THE DEPONENT: Again, related to ads
  - 3 reporting, it is based on the performance of those

- 4 ads. And I'm not -- I don't think that there are
- 08:50:38 5 other metrics that we report outside of the
  - 6 performance of their ads.
  - 7 Q. (By Ms. Weaver) And with regard to
  - 8 performance metrics, does -- has Facebook ever
  - 9 provided any information other than clicks and
- 08:50:50 10 views?
  - 11 A. The cost per clicks is an example. The
  - 12 payment -- or the -- the -- how much it has cost
  - 13 them to run that ad. There's a series -- I'm
  - 14 happy -- maybe that's -- I don't know the full
- 08:51:07 15 list, but I'm happy to get -- make sure that
  - 16 there's a screenshot provided of the UI.
  - 17 O. What is a cost per click?
  - 18 A. A cost per click is over -- the amount an
  - 19 advertiser has spent. If they spent five dollars
- 08:51:22 20 and they got 20 clicks in the delivery of that ad,
  - 21 the cost per click is literally the -- the amount
  - 22 spent per click. So the average cost per click.
  - Q. And what is payment per click?
  - 24 A. It's not a payment per click. It's just
- 08:51:40 25 the total they spend divided by the -- how much --

- 08:51:46 1 how many clicks they got. And then their total
  - 2 payment is how much they're charged for that ad.
  - 3 Q. Okay. In terms of the targeting
  - 4 categories advertisers can identify, can you
- 08:52:14 5 generally describe \*\*\* all of them?
  - 6 A. Yeah, absolutely.
  - 7 MR. BENJAMIN: Objection. Vague.
  - 8 THE DEPONENT: For -- so just as a
  - 9 starting point, when we say "identify," I -- I --
- 08:52:27 10 this -- what I'll describe is what's in -- what we
  - 11 provide to advertisers for them to set their
  - 12 desired audience.
  - 13 So when an advertiser goes to create an
  - 14 ad, like I said, they give us the content of their
- 08:52:39 15 ad. So what they want it to look like when it's
  - 16 run on Facebook. And then they set up their
  - 17 objective and the budget, the pacing, et cetera.
  - 18 And then they get to the -- the audience portion.
  - 19 And there they're given options that we
- 08:52:55 20 often bucket into what's called core audiences.
  - 21 And that might be demographics and location. So
  - 22 they're selecting whether they want to reach an age
  - 23 range and what that age range is. And then whether
  - 24 they want to reach everyone or men or women.
- 08:53:10 25 And then they select the location. So

- 08:53:14 1 for example, if they want to reach all of the state
  - 2 of Washington or -- or kind of within that, what
  - 3 realm, where they want their ad to be shown.
  - 4 Outside of our core audiences, we also
- 08:53:25 5 have what is called like detailed targeting. And
  - 6 that's -- that's based off -- or that's -- those
  - 7 are -- examples are interests or behaviors.
  - 8 So interest might be things like hobbies,
  - 9 topics, public figures that people have engaged
- 08:53:41 10 with. And then behaviors might be the way they
  - 11 connect to Facebook, their purchase behavior. So
  - 12 whether they've bought things before. If they
  - 13 interact with games, as an example.
  - 14 And then there are custom -- custom
- 08:53:56 15 audiences which largely break down into customer
  - 16 lists. So an advertiser providing information
  - 17 about their existing customers in order to reengage
  - 18 them. Website custom audiences and app custom
  - 19 audiences. And then our engagement custom
- 08:54:15 20 audiences, which is to reengage people who already
  - 21 interacted with your -- your page on Facebook.
  - Q. (By Ms. Weaver) So in your

- 23 understanding, is custom audiences a subset of
- 24 detailed targeting?
- 08:54:36 25 A. No. We usually consider it separate.

- 08:54:40 1 Q. And why is it separate?
  - 2 A. I mean, in large part because of the way
  - 3 we've structured the UI and how our conversations
  - 4 with advertiser have been about the flow of it.
- 08:54:52 5 It's also somewhat different in terms of the
  - 6 information that backs those -- those targeting
  - 7 options.
  - 8 So detail targeting, like I said, is --
  - 9 is -- are things like interests and behaviors.
- 08:55:04 10 Those are based on activity. Whereas, something
  - 11 like a custom audience is really much more specific
  - 12 to that advertiser. It's information about their
  - 13 existing customers. And so it's -- it's somewhat
  - 14 distinguished both from an advertiser mental model
- 08:55:19 15 but also in the UI.
  - 16 Q. Okay. So I'm hearing that there are --
  - 17 well, in the -- is engagement custom audiences a
  - 18 subset of custom audiences?
  - 19 A. Yes.

- 08:55:34 20 Q. And is that based on a -- different
  - 21 information that's backing it?
  - 22 A. Yes.
  - Q. So just to clarify, the custom audiences,
  - 24 they're -- those kind of three types, each one of
- 08:55:50 25 those would have different information that backs

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08:55:53 1 it.

- 3 are?
- 4 A. Customer lists. And then website custom
- 08:56:03 5 audiences. App custom audiences. And then the
  - 6 last kind of bucket is the engagement custom
  - 7 audiences.
  - 8 Q. And what's an engagement custom audience?
  - 9 A. When an advertiser has a page -- page on
- 08:56:16 10 Facebook, people will like interact, follow that
  - 11 page. The engagement custom audience is a way for
  - 12 an advertiser to say "I want the audience of my ad
  - 13 to be the people who have chosen to follow my
  - 14 page."
- 08:56:30 15 Q. Okay.
  - 16 A. And so on -- on Meta or on Facebook

- 17 activity to -- to -- for an advertiser to reengage
- 18 with their existing audience on Facebook.
- 19 Q. So recap, is it fair to say that you've
- 08:56:46 20 identified three kinds of targeted advertising core
  - 21 audiences to detail targeting and three custom
  - 22 audiences?
  - 23 A. Yes.
  - 24 MR. BENJAMIN: Objection to form.
- 08:57:00 25 Q. (By Ms. Weaver) And other than those

- 08:57:02 1 three, are you aware of any other kind of targeted
  - 2 advertising that has occurred at Facebook from 2007
  - 3 to the present?
  - 4 MR. BENJAMIN: Objection to form.
- 08:57:11 5 THE DEPONENT: Other kinds of advertising
  - 6 usually fit in with those three if -- those are how
  - 7 we've characterized and captured our targeting
  - 8 options for many years.
  - 9 Q. (By Ms. Weaver) And when you say "for
- 08:57:27 10 many years," can you identify -- be a little bit
  - 11 more specific?
  - 12 A. I think from 2007 onwards. I mean,
  - 13 that -- those -- that's how we describe the

- 14 categories of the types of targeting.
- - 16 advertising," are you thinking of other specific
  - 17 examples that you would slide into one of these
  - 18 three buckets?
  - 19 A. As an example, we used to have partner
- 08:57:54 20 categories. That's something that would have fit
  - 21 under the detailed targeting and has since been
  - 22 deprecated.
  - 23 Q. Anything other than partner categories
  - 24 that you're thinking of?
- 08:58:06 25 A. That was what I was thinking of

- 08:58:08 1 specifically. There have been -- I mean, changes
  - 2 within what we offer over the years, but I think
  - 3 the -- the structure of the three types is pretty
  - 4 consistent.
- 08:58:20 5 Q. And I should have said this at the
  - 6 outset. But you're here testifying on behalf of
  - 7 Facebook today, right, you're aware of that?
  - 8 A. Yes.
  - 9 Q. Okay. So when you're saying "you," it's
- 08:58:29 10 the Facebook you, unless you are telling me it's

- 11 your personal knowledge, correct?
- 12 A. Correct.
- 13 Q. And that applies to your previous
- 14 testimony and your testimony going forward,
- 08:58:38 15 correct?
  - 16 A. Correct.
  - 17 O. Okay. Thank you.
  - 18 What do you understand partner categories
  - 19 to mean?
- 08:58:45 20 A. Partner categories were targeting options
  - 21 that were built off of agreements with data brokers
  - 22 where we might not have had that information. And
  - 23 so it was a way to connect in information that
  - 24 advertisers found relevant to their ads and provide
- 08:59:02 25 that as a way for them to define their audience on

- 08:59:05 1 Facebook.
  - Q. And in this instance, when you define
  - 3 advertisers, are you including the data brokers or
  - 4 Facebook as well?
- 08:59:18 5 MR. BENJAMIN: Objection to form and
  - 6 scope.
  - 7 THE DEPONENT: I -- the advertiser is the

- 8 person buying the ad.
- 9 I'm not sure if that answers your
- 08:59:29 10 question.
  - 11 Q. (By Ms. Weaver) And sometimes did
  - 12 Facebook buy an ad?
  - 13 A. We do run our ads on our own platform,
  - 14 yes.
- 08:59:37 15 Q. And do you know if Facebook bought ads
  - 16 through partner categories?
  - 17 A. So it's not --
  - 18 MR. BENJAMIN: Objection to form and
  - 19 scope.
- 08:59:45 20 THE DEPONENT: It's not that you're
  - 21 buying an ad through a partner category. The
  - 22 partner category, as an example, like grocery
  - 23 shoppers, is one of the options in the creation of
  - 24 the ad through our -- our ad creation, so like ad
- 09:00:02 25 manager.

- 09:00:02 1 It would have been something someone can
  - 2 select to define their audience. When we create an
  - 3 ad, we also use those options. So I -- I honestly
  - 4 can't definitively say whether we did or didn't

- 09:00:13 5 ever use a partner category.
  - 6 Q. (By Ms. Weaver) And how long were
  - 7 partner categories in existence?
  - 8 A. They were deprecated in --
  - 9 MR. BENJAMIN: Objection -- objection to
- 09:00:24 10 form and scope.
  - 11 THE DEPONENT: They were deprecated in
  - 12 2018. And they were brought onto the platform
  - 13 several years earlier. But I don't know the exact
  - 14 year.
- 09:00:40 15 Q. (By Ms. Weaver) Who made the decision to
  - 16 deprecate partner categories?
  - 17 MR. BENJAMIN: Objection to form and
  - 18 scope.
  - 19 THE DEPONENT: This was not a singular
- 09:00:50 20 person's decision to deprecate partner categories.
  - Q. (By Ms. Weaver) Okay. But who -- who at
  - 22 Facebook, in general, whether it's a team or a
  - 23 name, decided to deprecate partner categories?
  - 24 A. This would have been --
- 09:01:01 25 MR. BENJAMIN: Objection to form and

- 2 THE DEPONENT: -- a decision across the
- 3 ads product policy and legal cross-functional team.
- 4 Q. (By Ms. Weaver) And what's your
- 09:01:12 5 understanding of why that decision was made?
  - 6 MR. BENJAMIN: Objection to form and
  - 7 scope.
  - 8 THE DEPONENT: My understanding is that
  - 9 we -- we felt that over time people's expectations
- 09:01:23 10 had evolved and that partner categories weren't
  - 11 something that we wanted to offer any longer.
  - 12 Q. (By Ms. Weaver) How were partner
  - 13 categories not consistent with people's
  - 14 expectations?
- 09:01:39 15 MR. BENJAMIN: Objection to form. Calls
  - 16 for speculation. Vague and scope.
  - 17 THE DEPONENT: My understanding is it's a
  - 18 type of data coming in. And though -- although it
  - 19 was transparent, there was decision to not offer
- 09:01:55 20 those any longer.
  - Q. (By Ms. Weaver) And you're saying the
  - 22 partner category is an example of detailed targeted
  - 23 advertising, right?
  - 24 A. It -- it falls into that bucket, yes.
- 09:02:10 25 Q. And -- and you're testifying about

- 09:02:13 1 targeted advertising today, right?
  - A. About our ad targeting and ad delivery,
  - 3 yes.
  - 4 Q. Okay. And as you sit here today, can you
- 09:02:24 5 explain why Facebook deprecated the kind of
  - 6 detailed targeted advertising that was called
  - 7 partner categories?
  - 8 MR. BENJAMIN: Objection to form. Scope.
  - 9 THE DEPONENT: We consistently look at
- 09:02:43 10 the targeting options we provide. We've deprecated
  - 11 a number of options, to partner categories is an
  - 12 example. That assessment is often done across the
  - 13 group, including with our product teams. And this
  - 14 wasn't a product they wanted to continue to
- 09:02:56 15 support.
  - 16 Q. (By Ms. Weaver) That's very general and
  - 17 it doesn't actually help me understand. So let me
  - 18 just try -- I'll ask a different question. Forget
  - 19 all the other examples.
- 09:03:07 20 With regard to partner categories, why
  - 21 did Facebook -- what were the reasons that Facebook
  - 22 decided to deprecate them?
  - 23 MR. BENJAMIN: Objection to form. Scope.

- 24 And to the extent that answering
- 09:03:24 25 Ms. Weaver's question would require you to disclose

- 09:03:27 1 privileged information, please carve that out of
  - 2 your answer.
  - 3 To the extent you can answer the
  - 4 question, please do so.
- 09:03:34 5 THE DEPONENT: I think I've answered the
  - 6 question to -- to that extent.
  - 7 I mean, we look at our products and we --
  - 8 we determine which ones to continue supporting.
  - 9 Partner categories was one that was then
- 09:03:46 10 deprecated.
  - 11 Q. (By Ms. Weaver) What particular
  - 12 characteristics of partner categories did Facebook
  - 13 consider and then decide the reason for deprecating
  - 14 it?
- 09:03:58 15 A. They were -- sorry. Go ahead, Matt.
  - 16 MR. BENJAMIN: Objection to form. Scope.
  - 17 And the same caution regarding privilege.
  - 18 THE DEPONENT: These were a place where
  - 19 we had data in. It was part of the decision, but
- 09:04:13 20 I -- this was just a product that was no longer

- 21 going to be supported.
- Q. (By Ms. Weaver) So I'm -- I'm trying to
- 23 understand the reasons for the decision, and you
- 24 keep just telling me what the decision was.
- 09:04:24 25 So let me try it this way. When Facebook

- 09:04:27 1 decides to deprecate a product, what are the
  - 2 considerations?
  - 3 MR. BENJAMIN: Objection to form.
  - 4 Q. (By Ms. Weaver) Let me restate it.
- 09:04:39 5 When Facebook decides to discontinue an
  - 6 advertising product, what are the reasons, in
  - 7 general?
  - 8 A. We'll look at their use, whether it's
  - 9 performing well. Is it helping deliver ads that
- 09:04:55 10 are relevant and interesting. Whether advertisers
  - 11 want it or not.
  - 12 And then also our understanding -- like
  - 13 from the policy side, we'll also understand whether
  - 14 or not these are areas that -- that other groups
- 09:05:12 15 use and industry standard.
  - I mean, there's a number of
  - 17 considerations, all kind of from everyone's

- 18 expertise. And I'm sure that's what was applied in
- 19 those conversations as well.
- 09:05:24 20 Q. Does Facebook consider user expectations
  - 21 in reaching such decisions?
  - 22 A. Yeah, absolutely. We -- we work to
  - 23 understand what our -- what our user base would
  - 24 want and -- and how they would prefer our product
- 09:05:40 25 to be built as well.

- 09:05:41 1 Q. Did Facebook consider user expectations
  - 2 when considering whether or not to deprecate
  - 3 partner categories?
  - 4 MR. BENJAMIN: Objection to form. Scope.
- 09:05:49 5 And the same instruction regarding privilege.
  - 6 THE DEPONENT: Yes. I think because it
  - 7 is always a consideration across all of our
  - 8 decisions.
  - 9 Q. (By Ms. Weaver) Who specifically would
- 09:06:07 10 know why Facebook deprecated partner categories?
  - 11 A. Again, it was a group decision. I mean,
  - 12 across the cross-functional group. I'm happy to --
  - 13 to work with the team to figure out who might be --
  - 14 who might have been part of that conversation,

- 09:06:22 15 specifically.
  - 16 Q. Yes. We would like to know by name who
  - 17 was involved in the decision to deprecate partner
  - 18 categories.
  - 19 And as you sit here today, you can't
- 09:06:33 20 provide that information; is that right?
  - 21 MR. BENJAMIN: Objection to form.
  - 22 Misstates. And objection to scope.
  - 23 THE DEPONENT: I've provided from the
  - 24 targeting side the way that we assess these
- 09:06:44 25 decisions. And I -- I'm not sure if there's much

- 09:06:49 1 more I could say on that one.
  - Q. (By Ms. Weaver) Okay. Just to be clear,
  - 3 for the record, I'm specifically asking if you can
  - 4 identify by name any one person involved in the
- 09:06:58 5 decision to deprecate partner categories.
  - 6 Can you?
  - 7 MR. BENJAMIN: Objection to form and
  - 8 scope.
  - 9 THE DEPONENT: A singular person or a
- 09:07:07 10 team?
  - Q. (By Ms. Weaver) Any -- any -- any names

- 12 that you can think of.
- 13 A. I mean, Andrew Howard was involved.
- 14 Q. Anyone else?
- 09:07:25 15 A. Like I said, there wasn't -- there
  - 16 were --
  - 17 (Simultaneously speaking.) \*\*\*
  - 18 MR. BENJAMIN: The same -- the same
  - 19 objections.
- 09:07:29 20 THE DEPONENT: There were multiple teams
  - 21 involved. I don't know the full list of the entire
  - 22 cross-functional team that was involved, as they
  - 23 are involved when we introduce a new product or
  - 24 deprecate other products.
- 09:07:41 25 Q. (By Ms. Weaver) Okay. But I'm not

- 09:07:42 1 asking for an exhaustive and complete list. I
  - 2 literally was asking if you can identify even a
  - 3 handful of people or one name.
  - 4 Other than Mr. Howard, can you identify
- 09:07:52 5 anybody else who was involved in the decision to
  - 6 deprecate partner categories?
  - 7 A. Amy Dunn.
  - 8 MR. BENJAMIN: Objection. Objection --

- 9 sorry, Bella. Objection to form.
- 09:08:00 10 THE DEPONENT: No, please.
  - 11 MR. BENJAMIN: Asked and answered. And
  - 12 scope.
  - 13 THE DEPONENT: Amy Dunn. She was a
  - 14 former -- she's now a former employee. She was one
- 09:08:11 15 of the product marketers for targeting. So I would
  - 16 assume was directly involved.
  - 17 Q. (By Ms. Weaver) Anyone else?
  - 18 A. Honestly, from the top of my head, for
  - 19 that exact decision, I -- I wouldn't be able to
- 09:08:27 20 tell you many more names.
  - Q. Who is Andrew Howard?
  - 22 A. He's on our policy team.
  - Q. And when you say "policy team," what do
  - 24 you mean?
- 09:08:40 25 A. The -- across ads. And then also other

- 09:08:45 1 products, there are -- there's a policy counterpart
  - 2 for that product. They participate in product
  - 3 development, product decisions. They work as part
  - 4 of the cross-functional team involved in developing
- 09:08:57 5 products. And Andrew is an example for ads.

- Q. And when you're saying "policy," what do
- 7 you mean?
- 8 A. I mean providing -- I mean -- I'm sorry.
- 9 I'm not totally sure what you mean by
- 09:09:14 10 that question.
  - 11 Q. You said there's a policy counterpart for
  - 12 that product.
  - 13 What do you mean by policy?
  - 14 A. So in this case, it's privacy policy.
- 09:09:21 15 It's the name of the team that Andrew is on and
  - 16 that I'm on. And we are -- we work with a product
  - 17 team as they develop products.
  - 18 Q. And how many people are on the privacy
  - 19 policy team currently?
- 09:09:37 20 A. Currently, I would, I think, ballpark
  - 21 probably 170. 170 people.
  - Q. When was the privacy policy team first
  - 23 established?
  - A. A long time ago. I'm -- I'm not sure of
- 09:09:57 25 the exact date when our team was established.

- 09:09:59 1 Q. Was there a privacy policy team in 2012?
  - 2 A. Yes, there was.

- 3 Q. And who was on it?
- 4 A. An example would be Rob Sherman or
- 09:10:11 5 Erin Egan.
  - 6 Q. And in 2012, how many people were on the
  - 7 privacy policy team?
  - 8 A. I can't tell you with high requested I
  - 9 many not sure size of at that point.
- 09:10:27 10 Q. Was it 170 people?
  - 11 A. No, the team has grown in the last 12
  - 12 years.
  - 13 O. Was it more than 20?
  - 14 A. I -- I would say yes, but I also don't
- 09:10:40 15 know exactly how we have reorg over that time
  - 16 period so it might have been a slightly different
  - 17 named team with different scope and yes.
  - 18 MR. BENJAMIN: Ms. Weaver, we've just
  - 19 been going for an -- well over an hour if he coming
- 09:10:59 20 good time tore a break?
  - 21 MS. WEAVER: Yeah, no problem let me just
  - 22 close this out if you don't mind.
  - MR. BENJAMIN: Of course.
  - Q. (By Ms. Weaver) You said Amy Dunn is
- 09:11:07 25 former right?

- 09:11:09 1 A. Yes Amy Dunn left I believe two years ago
  - 2 a year ago.
  - 3 Q. And where does she work now, if you know?
  - 4 A. I don't know.
- 09:11:16 5 Q. And it's DUNN?
  - 6 A. Yes, that's correct.
  - 7 Q. And how is first name spelled?
  - 8 A. AMY.
  - 9 O. And other than those two individuals can
- 09:11:26 10 you identify anybody else who is involved in the
  - 11 decision to deprecate partner categories?
  - 12 A. Rob Sherman would have been aware and
  - 13 probably involved, Victoria \*chin nor land was Amy
  - 14 counterpart and partner. Also on the marketing
- 09:11:47 15 side SPELL they would have been involved. And then
  - 16 I -- I mean that's -- that's who I can think of.
  - 17 MS. WEAVER: Okay. Great. We can take a
  - 18 break and go off the record.
  - 19 THE VIDEOGRAPHER: Okay. We are off the
- 09:12:04 20 record it's 9:12 a.m.
  - 21 (Recess taken.)
  - THE VIDEOGRAPHER: Okay. We are back on
  - 23 the record it's 9:39 a.m.
  - Q. (By Ms. Weaver) Ms. Leone, you

09:39:16 25 understand you are still under oath, correct?

59

- 09:39:19 1 A. Yes.
  - Q. Okay. When we broke, I had asked if you
  - 3 could remember anybody else other than
  - 4 Andrew Howard, Amy Dunn, Rob Sherman and \*\*Victoria
- 09:39:34 5 chin you were involved in the decision to deprecate
  - 6 partner categories.
  - 7 Do you recall that. You had asked that,
  - 8 yes.
  - 9 Q. Can you identify anyone other than those
- 09:39:43 10 four individuals who reached that decisions?
  - MR. BENJAMIN: Objection to form.
  - 12 Objection to scope. And I'm going to instruct the
  - 13 witness not to answer on the basis of privilege.
  - MS. WEAVER: She can't identify who was
- 09:39:59 15 involved in the discussion on the basis of privacy
  - 16 if they personally knows?
  - 17 MR. BENJAMIN: Well, I think this
  - 18 question has been asked and answered. But
  - 19 Ms. Leone to the extent you can answer Ms. Weavers
- 09:40:10 20 question without revealing privileged information
  - 21 or communications, you may do so.

- 22 THE DEPONENT: I know that it was across
- 23 functional team which is what I noted. Those are a
- 24 few people that I knew were involved and beyond
- 09:40:24 25 that, it's attorney-client privilege.

- 09:40:30 1 Q. (By Ms. Weaver) Do you have personal
  - 2 knowledge of any other individuals who were
  - 3 involved in the decision?
  - 4 MR. BENJAMIN: Objection scope and same
- 09:40:40 5 caution regarding privilege.
  - 6 THE DEPONENT: Those are -- the -- are
  - 7 people I can think of and beyond that it was a very
  - 8 large group as many of our product decisions are.
  - 9 Q. (By Ms. Weaver) How large was the group?
- 09:40:54 10 A. I can't.
  - 11 MR. BENJAMIN: Objection -- objection to
  - 12 form.
  - 13 THE DEPONENT: I don't know an exact
  - 14 number.
- 09:41:01 15 Q. (By Ms. Weaver) Okay. Let's turn to
  - 16 your testimony about the three categories of
  - 17 targeted advertising, you listed core audiences
  - 18 detailed targeting and custom audiences, correct?

- 19 A. Yes.
- 09:41:15 20 Q. With regard to core audiences, how long
  - 21 has that program be in use is it fair to call it a
  - 22 program?
  - 23 A. I think that's fair. I would use the
  - 24 word product. But yes. The parts that we
- 09:41:35 25 categorize into core audiences I think mentioned

- 09:41:40 1 age gender location have been part of our targeting
  - 2 option since we offered started to offering
  - 3 targeting options.
  - 4 Q. And what other demographics other than
- 09:41:52 5 age gender and location are used in core audiences?
  - 6 A. Those -- those are the core audiences
  - 7 demographics.
  - 8 Q. And with regard to gender what do you
  - 9 mean?
- 09:42:15 10 A. An advertiser has the option three kind
  - 11 of toggle reach all, reach men, reaching women.
  - 12 Q. And with regard to location, what options
  - 13 are afforded advertisers?
  - 14 A. When an advertiser goes to create their
- 09:42:37 15 ad in that location section, it effectively is a

- 16 map they can choose to select where they want their
- 17 ad to be shown. That can be by clicking on the
- 18 map. That can be by entering a -- a place -- or a
- 19 city a state. They can -- keyword search to match
- 09:43:00 20 where they want their ad to be shown.
  - Q. And how granular is the location
  - 22 selection?
  - 23 MR. BENJAMIN: Objection to form.
  - 24 THE DEPONENT: An advertiser can input
- 09:43:13 25 really kind of whatever granularity to an extent.

- 09:43:19 1 There is then a radius and that radius cannot be
  - 2 smaller than 1 mile.
  - 3 O. (By Ms. Weaver) And when was the
  - 4 restriction that the radius cannot be smaller than
- 09:43:31 5 1 mile implemented?
  - 6 A. I believe that has been in place
  - 7 throughout. I -- I don't believe that there was a
  - 8 time where we didn't have that.
  - 9 Q. So to be clear from 2007 forward it was
- 09:43:55 10 Facebook's policy that for core audiences the
  - 11 location could not be less than a 1 mile radius; is
  - 12 that right?

- 13 A. So the advertiser selection of where to
- 14 show their ad like that selection in terms of this
- 09:44:12 15 city, et cetera, I -- I don't -- I believe that
  - 16 there has always been -- so where those options
  - 17 have been provided I think there has always been
  - 18 the radius but I would honestly have to check on if
  - 19 the UI has changed in the way they select that.
- 09:44:36 20 Q. Was it ever possible for an advertiser to
  - 21 provide map coordinates to target users?
  - 22 MR. BENJAMIN: Objection. Objection to
  - 23 form.
  - 24 THE DEPONENT: They don't provide a map
- 09:44:48 25 coordinate. They can select like I was saying

- 09:44:52 1 there's a map they can select a point. But it's
  - 2 not that they are selecting users. They are
  - 3 selecting where they want their ad to be shown.
  - 4 Q. (By Ms. Weaver) And could they do that
- 09:45:02 5 with the specificity of a map coordinate at any
  - 6 point in time from 2007 to the present?
  - 7 A. With the radius that I mentioned.
  - 8 Q. And where would you go to confirm that
  - 9 the 1 mile radius was honored from 2007 to the

- 09:45:21 10 present?
  - 11 MR. BENJAMIN: Objection to form.
  - 12 THE DEPONENT: I -- I would probably
  - 13 discuss with our engineers if they can cross-check
  - 14 that. I'm not sure that we have code from 20 --
- 09:45:38 15 from 2007.
  - 16 Q. (By Ms. Weaver) Was there an enforcement
  - 17 mechanism to ensure that the 1 mile radius was
  - 18 included?
  - 19 MR. BENJAMIN: Objection to form. Vague.
- 09:45:54 20 THE DEPONENT: There -- the selection
  - 21 from the app to enforce the selection from the
  - 22 advertiser.
  - Q. (By Ms. Weaver) To gnasher Facebook's
  - 24 policy that had to be a 1 mile radius?
- 09:46:08 25 A. It was how location -- it's how location

- 09:46:12 1 targeting is rendered it's not a subsequent
  - 2 enforcement.
  - 3 Q. It was through the code that the 1 mile
  - 4 radius is enforced is that your testimony?
- 09:46:28 5 A. Yes, it's -- it's through how an
  - 6 advertiser selects location.

- 7 O. And so what information does Facebook
- 8 rely onto determine whose within the selected
- 9 location?
- 09:46:52 10 A. When a user uses Facebook we get location
  - 11 signals within that, so for example, if they have
  - 12 location services turned on we get that
  - 13 information. We understand where people are also
  - 14 based on how they check in so when someone says I'm
- 09:47:11 15 at the airport, we would understand and get that
  - 16 information and -- otherwise that people connect
  - 17 through and connect and use our platform tells you
  - 18 where they are.
  - 19 Q. What the other ways that users connect
- 09:47:25 20 and use the platform that tells Facebook where they
  - 21 are?
  - 22 A. IP would be an example.
  - Q. You are referring to theism P address?
  - 24 A. Of how they are directing in yes.

- 09:47:40 1 A. It's from your device how you are --
  - 2 where you are accessing a website for connecting to
  - 3 the Internet.

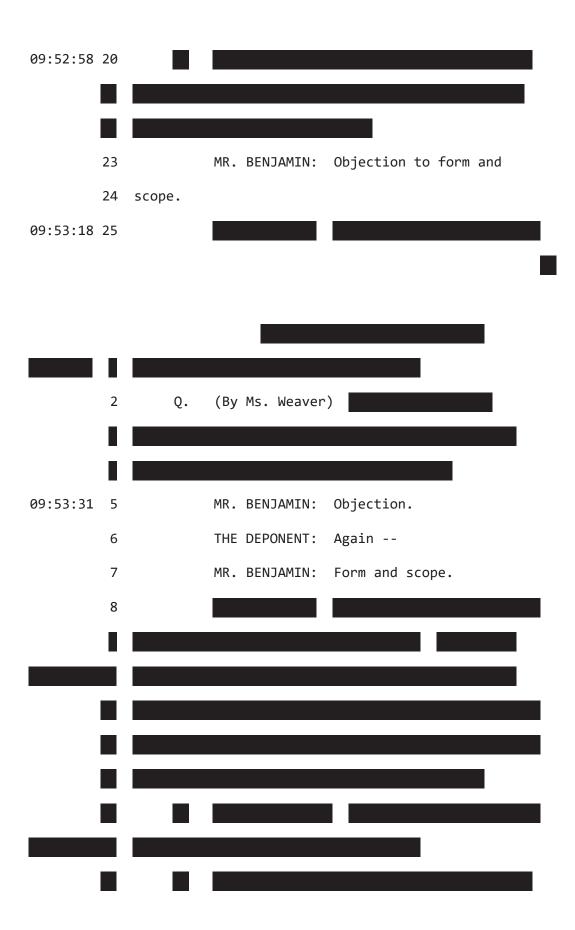
- 4 O. So in addition to check in and IP address
- 09:47:51 5 how else can Facebook define with users are to use
  - 6 that information for core audiences location
  - 7 selection?
  - 8 A. I think I want to make sure that we are
  - 9 clarifying the distinction here. An advertiser
- 09:48:05 10 selects where they want their ad to be shown. Once
  - 11 they have created that ad, we then determine who
  - 12 matchings there a audience those parameters. To do
  - 13 that we use people's activity and how they are
  - 14 connected to Facebook including like their location
- 09:48:23 15 services and the other pieces that I mentioned
  - 16 there, is that what you were getting at?
  - 17 Q. Right.
  - 18 And so I'm asking to make that
  - 19 determination about whether users are within the
- 09:48:37 20 selected location, what information does Facebook
  - 21 use?
  - 22 A. It's what I answered it's location
  - 23 services on their device. How they connect to
  - 24 Facebook. And other -- another example would be if
- 09:48:53 25 they check in people can also provide on their

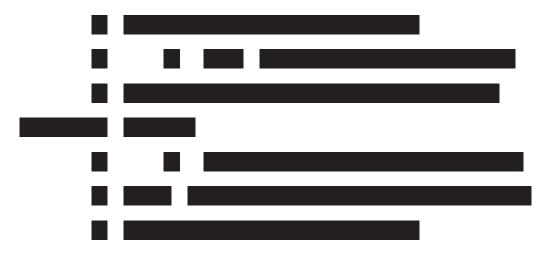
- 09:48:57 1 profile where they live. Those -- that's an
  - 2 example of information we use to determine their
  - 3 part -- they should meet audience parameters.
  - 4 Q. When you say "location services" what
- 09:49:10 5 does that refer to?
  - 6 A. It's a setting on devices that -- of on
  - 7 our iPhone for example, that let's Facebook
  - 8 understand where you are.
  - 9 Q. Does Facebook use any other information
- 09:49:26 10 to determine the location of users so that users
  - 11 are targeted through core audiences by location?
  - 12 A. Yes, as I mentioned, check ins can
  - 13 contribute to knowing where someone is. Same thing
  - 14 as where they designate their hometown or where
- 09:49:46 15 they live on their profile.
  - 16 Q. When a user initiate a post for example,
  - 17 does the Meta data reflect where the user was when
  - 18 the user made that post?
  - 19 MR. BENJAMIN: Objection to form.
- 09:50:18 20 THE DEPONENT: The active there --
  - 21 honestly I -- that's pretty far outside of the ad
  - 22 specific piece. If we -- if we collect that
  - 23 related to nonads someone posting something.
  - 24 If they were to -- the example I was
- 09:50:36 25 trying to give was like a page check in or where I

- 09:50:39 1 specifically post I'm at the airport, because it
  - 2 translates into a check in. I'm not sure if that's
  - 3 what -- what you are indicating.
  - 4 Q. (By Ms. Weaver) No it's not.
- 09:50:49 5 Let's give -- let me give a different
  - 6 example if somebody post a picture does the
  - 7 metadata on the picture indicate where the picture
  - 8 was taken and if it does is that the kind of
  - 9 information that Facebook uses to identify a user
- 09:51:04 10 location for use and core audiences location
  - 11 selection?
  - MR. BENJAMIN: Objection to form.
  - 13 Compound. Vague. Scope.
  - 14 THE DEPONENT: If someone makes a post
- 09:51:19 15 they have connected to Facebook in some manner. We
  - 16 do use information about how someone connects to
  - 17 Facebook to understand where they are and that is
  - 18 used also for ads.
  - 19 Q. (By Ms. Weaver) And when you say they
- 09:51:36 20 have connected to Facebook in some manner, what do
  - 21 you mean?
  - 22 A. I mean you have logged in or you are on a

- 23 browser and you are using Facebook.
- Q. And does Facebook distinguish for core
- 09:51:50 25 audience location advertising whether that photo

- 09:51:52 1 that was posted was marked public or private?
  - 2 A. These are very different concepts. The
  - 3 core audiences is simply how an advertiser selects
  - 4 the parameter for their ad. When we then determine
- 09:52:08 5 if someone is eligible to see that ad, whether they
  - 6 meet it, it is based on people's activity on
  - 7 Facebook. And it's not differentiated in public or
  - 8 private because again that's not reflective of how
  - 9 someone's activity on Facebook is categorized.
- 09:52:29 10 Q. With regard to the demographic age used
  - 11 in core audiences what is the information Facebook
  - 12 uses to determine someone's age?
  - 13 A. That's based on the -- the age they
  - 14 provide at sign up we provide a user to provide
- 09:52:45 15 that age and that's also what we use to determine
  - 16 if they should see an ad.
  - 17 O. And how does Facebook determine users
  - 18 gender the same answer?
  - 19 A. Yeah, yes.





Q. And Facebook's selected you as a

09:54:39 25 representative on that topic today too, right?

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- 09:54:42 1 A. On ad targeting and ad delivery, yes.
  - Q. Okay. Let's turn to detail targeting.
  - 3 What is detailed targeting as you have
  - 4 described it?
- 09:54:57 5 A. Detailed targeting is how -- is how we
  - 6 again segment for advertisers when they are setting
  - 7 up their ads. It includes interests and behavior
  - 8 options for targeting.
  - 9 Q. And when detailed targeting first
- 09:55:17 10 implemented at Facebook?
  - 11 A. In the form of what it looks like today
  - 12 it would have been I believe between like 2010,
  - 13 about 2010 that's -- that's -- I think it is

- 14 important to note the evolution of what that looks
- 09:55:39 15 like in the UI has changed over time. But the idea
  - 16 of having interest and behaviors I think was about
  - 17 then.
  - 18 Q. And what team and people were responsible
  - 19 for commencing the detail targeting at Facebook?
- 09:55:57 20 A. Our ads product team.
  - Q. And who was on the ads product team who
  - 22 was part of that decision in 2010, if you know?
  - 23 A. I don't know an individual from the ads
  - 24 product team specifically who was part of that
- 09:56:12 25 decision. Again these are often large teams that

- 09:56:16 1 create road maps to -- to build the tools we offer
  - 2 advertiser or any other product at -- at Facebook.
  - 3 Q. Why did Facebook decide to engage in
  - 4 detailed targeting on or around 2010?
- 09:56:33 5 A. One of our core goals is to ensure that
  - 6 the advertising experience is interesting and
  - 7 relevant to people. Enabling that is one way to do
  - 8 that is to help understand what they might be
  - 9 interested in and then an advertiser can select who
- 09:56:50 10 they think the audience that might be most relevant

- 11 for their product. Interest, which is part of
- 12 detailed targeting is an example where that was
- 13 further to goal have having more interesting ads
- 14 than if it was broadly targeted and relative -- and
- 09:57:08 15 relevant to the person seeing it.
  - 16 Q. And so how did detailed targeting help
  - 17 accomplish that goal?
  - 18 A. It is enabled someone an advertiser to
  - 19 select that they wanted to reach people who have an
- 09:57:24 20 interest in something based on continued engagement
  - 21 with that topic.
  - Q. And specifically what are the topics
  - 23 detail let's start today Facebook?
  - 24 A. Within interest there's quite a few I
- 09:57:49 25 believe about 60,000 interests are provided to

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- 09:57:52 1 today. Those vary between hobbies TV shows public
  - 2 figures any nun of topics that -- that we have seen
  - 3 consistent engagement on that would be relevant to
  - 4 research someone because they are interested in it
- 09:58:08 5 CHECK/CHECK.
  - 6 Q. And how is this list of 60,000 provided
  - 7 to advertisers?

- 8 A. In the ad creation flow an advertiser can
- 9 Brouse through a structured list, so for example,
- 09:58:22 10 can click and say I'm looking for things related to
  - 11 facial entertain or the keyword search and input, a
  - 12 search term and we'll render the ones that match
  - 13 that search term they select individual interests
  - 14 from there.
- 09:58:41 15 Q. If a category is not on the list, can
  - 16 advertiser propose a new interest category and then
  - 17 use the target users?
  - 18 MR. BENJAMIN: Objection to form.
  - 19 THE DEPONENT: Do you mean through --
- 09:59:00 20 through the ad creation?
  - Q. (By Ms. Weaver) Or at all.
  - 22 A. There isn't a way for advertiser to
  - 23 select something that doesn't exist and then
  - 24 immediately enable targeting on that that's not --
- 09:59:13 25 that's not a functionality we offer.

- 09:59:18 1 Q. But can advertiser email their contact at
  - 2 Facebook and say we would like to target based on
  - 3 this criteria. Can you make that happen?
  - 4 MR. BENJAMIN: Objection.

- 09:59:28 5 THE DEPONENT: I'm sure advertiser.
  - 6 MR. BENJAMIN: Objection -- objection to
  - 7 form.
  - 8 THE DEPONENT: Advertiser could email
  - 9 that. It is not something that we implement.
- 09:59:38 10 Q. (By Ms. Weaver) And why is that?
  - 11 A. The interest we provide are the areas
  - 12 where we have seen continued engagement. It's not
  - 13 based off on advertiser. A somewhat ad hoc
  - 14 advertiser request.
- 09:59:52 15 Q. Does -- so you've testified that to date
  - 16 it's roughly 60,000 interest categories; is that
  - 17 right?
  - 18 A. Yes, that's correct.
  - 19 Q. And can you describe over time perhaps
- 10:00:09 20 how that list has accrued?
  - 21 MR. BENJAMIN: Objection to form.
  - 22 THE DEPONENT: The -- the list has --
  - 23 like I was saying is based on topics that we see
  - 24 people engaging with. So we have both added and
- 10:00:26 25 removed interests over time to help ensure that

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10:00:29 1 they remain relevant and actually useful for people

- 2 to see content they want to engage and for
- 3 advertiser to reach audience that they are trying
- 4 to reach.
- 10:00:43 5 Q. (By Ms. Weaver) So is that bags had on
  - 6 both input from advertiser and internal Facebook
  - 7 analyses?
  - 8 A. It's not based on input from advertiser
  - 9 in the example we gave about an email. But if we
- 10:01:03 10 understand that there is high demand to -- to reach
  - 11 people interested in -- entertainment and we see
  - 12 that that is something that people engage with.
  - 13 It -- it could be an area we expand into. That's
  - 14 relatively common and -- and like market research
- 10:01:21 15 to understand like what is a useful tool.
  - 16 Q. And when we understand that there is high
  - 17 demand "you mean that advertisers are interested in
  - 18 certain categories and will pay Facebook for that";
  - 19 is that fair?
- 10:01:39 20 MR. BENJAMIN: Objection to form.
  - 21 THE DEPONENT: It's that we want to build
  - 22 tools that actually enable advertiser to create an
  - 23 ad and also that that is relevant to people and so
  - 24 we do that the way many products are developed
- 10:01:54 25 through market research understanding what people

- 10:01:56 1 need and then also what -- what we would or
  - 2 wouldn't be able to provide.
  - Q. (By Ms. Weaver) Are there -- there any
  - 4 other Ime pits into the creating the interest
- 10:02:10 5 categories that you can think refer to?
  - 6 MR. BENJAMIN: Objection to form vague.
  - 7 THE DEPONENT: It's -- again it's based
  - 8 on our understanding what would be a useful
  - 9 addition we haven't added new interests recently.
- 10:02:27 10 It's -- because the interest list is relatively
  - 11 stable at that point you can imagine a scenario
  - 12 where if there is a -- a new TV show. It might
  - 13 make sense to add that in based on the engagement
  - 14 we are seeing. But that would be an example of how
- 10:02:44 15 the process occurs.
  - 16 Q. (By Ms. Weaver) When you say useful
  - 17 addition you mean useful for purposes of
  - 18 advertising; is that right?
  - 19 A. Both for advertiser to reach a relevant
- 10:02:58 20 audience and for people to see ads that are
  - 21 interesting and relevant to them.
  - Q. And how does Facebook determine what
  - 23 users think is interesting and relevant to them?

24 A. Our interest are based on activity on 10:03:15 25 Facebook for example. Continuous engagement with a

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- 10:03:18 1 topic, so if I like many pages about interior
  - 2 design you might assign -- you might say that I'm
  - 3 interested in interior design and that would be an
  - 4 interest so it's that topic type of topic based
- 10:03:35 5 understanding.
  - 6 Q. Does Facebook also record users viewing a
  - 7 video?
  - 8 A. We determine just.
  - 9 Q. Sorry.
- 10:03:51 10 MR. BENJAMIN: Objection to form.
  - 11 THE DEPONENT: We -- if a page post a
  - 12 video and someone in interacts with it including
  - 13 viewing it, we would consider that an interaction
  - 14 with that page and the content of that page. So
- 10:04:06 15 going back to the -- somewhat random interior
  - 16 design example if there is interior design page and
  - 17 I like it, I follow it. And I watch the videos on
  - 18 that page that could contribute to my interactions
  - 19 with -- with that page, yes.
- 10:04:22 20 Q. (By Ms. Weaver) Does Facebook track how

- 21 long users have watched a specific video?
- MR. BENJAMIN: Objection to form and
- 23 scope W.
- 24 THE DEPONENT: We do. It's not a
- 10:04:39 25 specific piece of information that -- that I -- I

- 10:04:49 1 don't think that there is a specific threshold in
  - 2 that scenario that we leverage for like ads
  - 3 interests if that's what -- yeah.
  - 4 Q. (By Ms. Weaver) So to determine what
- 10:05:04 5 categories are targeted Facebook also looks at
  - 6 users activity to determine whether or not those
  - 7 categories would exist in the first place; is that
  - 8 fair?
  - 9 MR. BENJAMIN: Objection to form.
- 10:05:20 10 THE DEPONENT: I am sorry I think I need
  - 11 to clarify a little bit on the question.
  - 12 Q. (By Ms. Weaver) No problem.
  - We are discussing how the 60,000 interest
  - 14 categories were created, right?
- 10:05:30 15 A. Yup.
  - 16 Q. And one component was whether or not
  - 17 there's high demand because advertisers are

- 18 interested in it, right?
- 19 A. Based on our market research, yes.
- 10:05:41 20 Q. And another component is whether or not
  - 21 users are seeing the ads Facebook thinks they would
  - 22 like to see, correct?
  - 23 A. Another -- for interest creation
  - 24 specifically?
- 10:05:57 25 Q. Sure.

- 10:05:59 1 A. We -- in order to generate interests, we
  - 2 determine what are the topics that people engage
  - 3 with to -- and like what are groups like -- like
  - 4 content on page, content -- classification those
- 10:06:15 5 topics that people have engaged with. If there is
  - 6 a topic that nobody is engaging with it wouldn't
  - 7 have been something we came up with. Because it is
  - 8 based on -- on understanding the topics that people
  - 9 engage with to provide an interest.
- 10:06:33 10 Q. So is it fair to say that Facebook
  - 11 analysis users uses act term to what categories of
  - 12 into are available for advertiser to target them;
  - 13 is that fair?
  - 14 A. At the --

- 10:06:47 15 MR. BENJAMIN: Objection -- objection to
  - 16 form.
  - 17 THE DEPONENT: It's fair to say that we
  - 18 look at the content people engage with to determine
  - 19 their interest and those can include them in -- in
- 10:07:05 20 an interest that we also provide to advertisers
  - 21 when they are setting the parameters for their
  - 22 audience.
  - Q. (By Ms. Weaver) Okay. In general can
  - 24 you identify roughly how many of these interest
- 10:07:22 25 categories tore detailed targeting that were

- 10:07:24 1 available in 2012?
  - A. Roughly several hundred thousand.
  - 3 0. In 2012 there were several hundred
  - 4 thousand and today there are 60,000?
- 10:07:45 5 A. Correct.
  - 6 Q. So over time the number of interest
  - 7 categories has decreased rather dramatically; is
  - 8 that right?
  - 9 MR. BENJAMIN: Objection to form.
- 10:07:56 10 THE DEPONENT: It has decreased over --
  - 11 over -- over a number of years we have both added

- 12 in and removed interests.
- 13 Q. (By Ms. Weaver) Does Facebook have a
- 14 record of the categories for interest targeting
- 10:08:10 15 tore detailed targeting that were available in
  - 16 2012?
  - 17 A. So because our system has evolved, I --
  - 18 there isn't a comprehensive or day by day view of
  - 19 all the interests. We know what -- what is
- 10:08:30 20 provided in the product today. And I -- there
  - 21 isn't -- a full list over many years.
  - Q. Is it possible to roughly piece tote what
  - 23 those categories are over time?
  - 24 MR. BENJAMIN: Objection to form.
- 10:08:51 25 THE DEPONENT: Not very high accuracy.

- 10:08:58 1 Q. (By Ms. Weaver) Did Facebook tell users
  - 2 in 2010 what interest categories it was making
  - 3 available to advertiser for detailed targeting?
  - 4 A. Users can access the ads manager. It's a
- 10:09:20 5 self serve everybody is able to see what's --
  - 6 what's there. And so a user would have been able
  - 7 to also look and see what are interest categories
  - 8 that are available.

- 9 Q. So it's your testimony that in 2012 a
- 10:09:37 10 user could have looked up and seen this several
  - 11 100,000 interest categories that advertisers were
  - 12 using to the -- are get them?
  - 13 MR. BENJAMIN: Objection -- objection to
  - 14 form and misstates.
- 10:09:50 15 THE DEPONENT: Yes, so yes to the
  - 16 objection. Apologies. The -- they would be able
  - 17 to see what are all the options in advertiser can
  - 18 reach. Because our ad creation flow such as ad
  - 19 manager self-serve and open to the public to look
- 10:10:10 20 at. So any user could go in and say here all the
  - 21 interest advertiser can select. It is not an
  - 22 indication that they are all associated with one
  - 23 user.
  - Q. (By Ms. Weaver) Meaning a user could not
- 10:10:24 25 determine which interest he or she had specifically

- 10:10:28 1 been targeted for, correct?
  - 2 A. We introduce --
  - 3 MR. BENJAMIN: Objection. Objection.
  - 4 Form. Vague.
- 10:10:38 5 THE DEPONENT: Today users can see the

- 6 interest they are associated with and we have had
- 7 had that for a number of years.
- 8 Q. (By Ms. Weaver) And when did that
- 9 commence?
- 10:10:50 10 A. 2014 where we launched our ad
  - 11 preferences.
  - 12 Q. And beginning in 2014, could users see
  - 13 all of the interests that they were actually
  - 14 targeted for?
- 10:11:04 15 A. They could see the interests that were
  - 16 associated with them that they were part of that
  - 17 were being used by advertiser.
  - 18 Q. And could they see all of those interests
  - 19 or was it just a -- an overview?
- 10:11:20 20 A. Do you mean immediately at launch or over
  - 21 time.
  - Q. At any point in time?
  - MR. BENJAMIN: Objection.
  - 24 THE DEPONENT: Yes, yes.
- 10:11:30 25 MR. BENJAMIN: Objection to form.

- 10:11:34 1 THE DEPONENT: Over the years and today,
  - 2 a user can open ad preferences and see all of the

- 3 interests that are associated with them that are
- 4 available for targeting.
- 10:11:45 5 Q. (By Ms. Weaver) And when did that
  - 6 functionality first become effective which is to
  - 7 say that a user could view every single interest
  - 8 for which they have been targeted for detailed
  - 9 targeting?
- 10:11:57 10 A. In 2014, we launched ad preferences. It
  - 11 began with the interest that -- that were actively
  - 12 being used, so that had an ad run against them and
  - 13 then rolled out to include all interests that were
  - 14 targetable. That would have been likely over --
- 10:12:17 15 the course of 2014, I don't know the exact month.
  - 16 Q. And does Facebook generate interest
  - 17 categories based on off platform activity?
  - 18 A. Interest are based on -- on-site
  - 19 activity.
- 10:12:33 20 Q. Only on platform?
  - 21 A. Yes.
  - Q. Does -- do users have the capability to
  - 23 decline being targeted for a specific interest?
  - 24 A. Yes.
- 10:12:49 25 O. And when was that first implemented.

- 10:12:55 1 Q. In 2014. And how does Facebook enforce
  - 2 that a user is not targeted based on a specific
  - 3 interest?
  - 4 A. When a user chooses to remove themselves
- 10:13:11 5 from an interest they are no longer included in
  - 6 that interest so any add that has interest as part
  - 7 of their audience parameters the user would not be
  - B included in that audience.
  - 9 Q. And are you familiar with the concept of
- 10:13:27 10 opt in versus opt out?
  - 11 A. Yes.
  - 12 Q. And what's your understanding of what
  - 13 those words mean?
  - 14 A. It -- my understanding would be that the
- 10:13:38 15 choices either you are in it and you are -- you are
  - 16 given the opportunity to opt out so you are making
  - 17 a choice to remove yourself from a state where you
  - 18 in it and then opt in would be the opposite you are
  - 19 not in it and you are given the choice to enter.
- 10:13:53 20 Q. And why did Facebook decide that users
  - 21 should opt out rather than opt in to interest for
  - 22 detailed targeting?
  - 23 A. We understand that people want to see
  - 24 relevant ads. It is part of the experience on

10:14:08 25 Facebook otherwise they would see irrelevant ads

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- 10:14:11 1 interest is one way to do that. And so we -- we
  - 2 provided people with interest and gave them the
  - 3 opportunity to see them those and then remove
  - 4 themselves.
- 10:14:22 5 Q. Are you aware of internal studies at
  - 6 Facebook that concluded in fact users would --
  - 7 would prefer to opt in as opposed to to opt out?
  - 8 MR. BENJAMIN: Objection to form and
  - 9 scope.
- 10:14:38 10 THE DEPONENT: For ads I'm not aware of a
  - 11 study that's specifically looks at an opt in verify
  - 12 out opt our reference for interest.
  - 13 Q. (By Ms. Weaver) Are you aware of any
  - 14 studies in general that discuss opt out versus opt
- 10:14:49 15 out preferences for users?
  - MR. BENJAMIN: Objection. To scope.
  - 17 THE DEPONENT: Across all of Facebook?
  - 18 Q. (By Ms. Weaver) Well, you answered, your
  - 19 answer was very specific I'm trying to understand
- 10:15:02 20 why.
  - 21 You said for ads I'm not aware of a study

- 22 that's specifically looks at opt in or opt out for
- 23 ads interest.
- 24 So I'm just trying to ask are you aware
- 10:15:12 25 of a study who opt in or opt out in general?

- 10:15:20 1 MR. BENJAMIN: Objection.
  - THE DEPONENT: No.
  - 3 MR. BENJAMIN: Objection to scope.
  - 4 MS. WEAVER: Let's go off the record real
- 10:15:34 5 quickie will fix it.
  - 6 (Court Reporter initiates discussion off
  - 7 the record.)
  - 8 THE VIDEOGRAPHER: Okay. We are off the
  - 9 record it's 10:15 a.m.
- 10:16:38 10 (Recess taken.)
  - 11 THE VIDEOGRAPHER: Okay. We are back on
  - 12 the record it's 10:16 a.m.
  - 13 Q. (By Ms. Weaver) Are you aware of
  - 14 internal discussions at Facebook in regard to
- 10:17:02 15 whether or not users would want to opt in or opt
  - 16 out to certain kinds of detailed targeted
  - 17 advertising?
  - 18 MR. BENJAMIN: Objection to scope.

- 19 THE DEPONENT: I'm not aware of
- 10:17:14 20 discussions on those preferences.
  - Q. (By Ms. Weaver) Do you know how the
  - 22 decision was made that Facebook would require users
  - 23 to opt out rather than opt in to interest
  - 24 categories of detailed targeting advertising?
- 10:17:32 25 MR. BENJAMIN: Objection to form. Vague

- 10:17:34 1 and scope.
  - 2 THE DEPONENT: The product was built
  - 3 because we knew these -- because these were areas
  - 4 that people had already engaged with and we knew
- 10:17:46 5 that they were interested win them. And so the
  - 6 control reflects that by giving them the ability to
  - 7 re November themselves from it. I was by design.
  - 8 Q. (By Ms. Weaver) So in beginning do you
  - 9 know how many users reviewed the hundreds of
- 10:18:00 10 thousand interest categories and defense selected
  - 11 themselves?
  - MR. BENJAMIN: Objection to form.
  - 13 THE DEPONENT: Just to be clear each user
  - 14 was not associated with all the interest
- 10:18:17 15 categories. They wouldn't -- there -- it wouldn't

- 16 have been they had hundreds of thousand of their
- 17 interests. Once we rolled out ad preferences I --
- 18 I don't know the exact number of users who -- who
- 19 choose to remove themselves from an interest when
- 10:18:37 20 that was rolled out.
  - Q. (By Ms. Weaver) Can you identify anyone
  - 22 you are aware of who has ever chosen to engage in
  - 23 that process?
  - 24 MR. BENJAMIN: Objection to form and
- 10:18:51 25 scope.

- 10:18:55 1 THE DEPONENT: Do you mean specifically
  - 2 to remove them from an interest.
  - 3 Q. (By Ms. Weaver) Yeah. Yes?
  - 4 A.
- 10:19:00 5 Q.

  - 7 MR. BENJAMIN: Objection to form and
  - 8 scope.
  - 9 THE DEPONENT:

- 14 Q. (By Ms. Weaver) Does Facebook maintain
- 10:19:28 15 statistics on how many users have gone to the --
  - 16 why I am seeing this page?
  - 17 A. Yes.
  - 18 Q. And where are those statistics?
  - 19 MR. BENJAMIN: Objection to form.
- 10:19:47 20 THE DEPONENT: We would log those
  - 21
  - Q. (By Ms. Weaver) And when you say would
  - 23 would what do you mean knowledge I mean
  - 24 when someone such as a hide ad or why I am seeing
- 10:20:04 25 this. We -- we know or we log that that action has

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- 10:20:08 1 been taken.
  - Q. For what time period has that activity
  - 3 been logged ?
  - 4 MR. BENJAMIN: Objection to form. Vague.
- 10:20:25 5 THE DEPONENT: Over -- we have logged --
  - 6 logged that activity since we launched -- is --
  - 7 does that answer your question is that what? Is
  - 8 that what you are were asking?
  - 9 Q. (By Ms. Weaver) When you say since we

- 10:20:45 10 launched you mean 2007 or 2014?
  - 11 A. Waste launched -- launched in 2014 why I
  - 12 am seeing this was why I am seeing this was
  - 13 launched in 2014.
  - 14 Q. Oh.
- 10:20:56 15 A. Once it became a product, we began to log
  - 16 when -- when someone would access it.
  - 17 O. So for the record. You are using an
  - 18 acronym waste which stands for why?
  - 19 A. I am.
- 10:21:07 20 Q. Why I many a seeing this; is that right?
  - 21 A. Yes, CHECK/CHECK check apologize I
  - 22 thought I define it earlier that's my mistake.
  - Q. Perhaps I missed it.
  - 24 Okay. Are there other activities that
- 10:21:25 25 users engage in that effect whether or not they are

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10:21:31 1 targeted by certain interests that are logged



- 3 MR. BENJAMIN: Objection to form.
- 4 THE DEPONENT: Interests are based on
- 10:21:42 5 people's activity so for example if they
  - 6 consistently engage with a page or ad or any form

- 7 of like aggregated continuous engagement with a
- 8 topic is what ads someone to interest if they doing
- 9 that than they wouldn't be added to it.
- 10:22:01 10 So the -- the people's page -- page likes
  - 11 are logged and that's an example of
  - 12 activity that would also contribute to an interest.
  - 13 Q. (By Ms. Weaver) In addition to page
  - 14 likes what other kinds of activities are logged
  - about users that you are aware of?
  - 16 A. For interests.
  - 17 Q. In general. For interest and yes in
  - 18 general.
  - 19 A. Again people's activity on the platform
- 10:22:35 20 is logged . So if I had a friend or if I
  - 21 had something to my profile that's something we
  - 22 store .
  - Q. Do you count Facebook messenger active as
  - 24 activity on the platform in your answers?
- 10:22:55 25 A. Yes.

- 10:22:56 1 Q. Are -- where are users Facebook Messenger
  - 2 messages logged?
  - 3 MR. BENJAMIN: Objection to form and

- 4 scope.
- 10:23:08 5 THE DEPONENT: This is pretty far outside
  - 6 of ads specific. The fact that someone uses
  - 7 messenger is logged . I think that that's
  - 8 what you are getting at and if they initiate
  - 9 threads it would -- logged there to.
- 10:23:24 10 Q. (By Ms. Weaver) When you say they
  - 11 initiate threads what do you mean?
  - 12 A. If I create --
  - MR. BENJAMIN: Objection to scope.
  - 14 THE DEPONENT: Creating a thread with
- 10:23:37 15 Matt for example would be something that we log.
  - 16 Q. (By Ms. Weaver) And so what is the log
  - 17 reflect does it reflect the whole thread or just
  - 18 the fact that a thread was initiated with time with
  - 19 certain users?
- 10:23:51 20 MR. BENJAMIN: Objection to form and
  - 21 scope.
  - 22 THE DEPONENT: This is something I don't
  - 23 know. This is pre tee far outside ads.
  - Q. (By Ms. Weaver) So this activity for
- 10:24:01 25 Facebook Messenger used to create interests in used

- 10:24:07 1 in any form of advertising not limited to detailed
  - 2 interest but in general?
  - 3 MR. BENJAMIN: Objection to form.
  - 4 THE DEPONENT: To separate out the
- 10:24:16 5 portions of that question, interests are based on
  - 6 activity on the platform. But page and ad activity
  - 7 messenger is not part of that for interests.
  - 8 Generally across ad delivery we use information
  - 9 about how people use Facebook to inform what ad to
- 10:24:38 10 show them. So if we know that someone has
  - 11 consistently messaged pages we might be more likely
  - 12 to show them an ad that is -- has a message
  - 13 objective. So I think that answer -- is that what
  - 14 you are getting at.
- 10:24:56 15 Q. (By Ms. Weaver) Yes, that's exactly it
  - 16 toes Facebook also look at the content of messenger
  - 17 messages to determine what interests users might
  - 18 have the target --
  - 19 A. No. No.
- - 21 A. No.
  - Q. But if they message about a page, or a
  - 23 group, would that information be used to target
  - 24 them?
- 10:25:23 25 A. Would you mind clarifying what you mean

- 10:25:24 1 by "message."
  - Q. Well you testified -- so if someone has
  - 3 consistently messaged -- messaged pages, what do
  - 4 you mean?
- 10:25:36 5 A. I meant specifically reached out to a
  - 6 page via messenger.
  - 7 Q. Okay. And would that also -- is also
  - 8 true for groups?
  - 9 A. You can't message a group.
- 10:25:48 10 Q. Okay.
  - 11 A. Or the -- let me make sure that we -- we
  - 12 are kind of talking about the same thing. So the
  - 13 group product which is this is a group on Facebook
  - 14 and I join it, that isn't connected in -- in the --
- 10:26:06 15 I think in the way you are thinking about it. With
  - 16 messenger. You don't message into a group in the
  - 17 same way. And we don't use message content from
  - 18 like between friends to inform an ad.
  - 19 Q. What if you are -- so you referenced a
- 10:26:23 20 page in the messenger communication, Facebook will
  - 21 use that information, correct?
  - 22 A. Between -- no, it it is specifically if I

- 23 Bella choose to message Nike's page we would know
- 24 that I interacted with that page and that is
- 10:26:41 25 something that inform my ads because it's an

- 10:26:43 1 interaction with a page.
  - Q. Understood.
  - 3 Does Facebook use information in Facebook
  - 4 messages to calculate users desire to be targeted
- 10:27:11 5 with a certain kind of ad?
  - 6 MR. BENJAMIN: Objection to form.
  - 7 THE DEPONENT: The content of a message
  - 8 between friends on through messenger is not used to
  - 9 inform ads it would -- no be used to predict
- 10:27:33 10 someone's interest or whether or not they want to
  - 11 see an ad.
  - 12 Q. (By Ms. Weaver) Do you know if it's used
  - 13 for research?
  - 14 MR. BENJAMIN: Objection to form and
- 10:27:41 15 scope.
  - 16 THE DEPONENT: I do not.
  - 17 Q. (By Ms. Weaver) And why is the content
  - 18 of a message not used to inform ads?
  - 19 A. We haven't historically used it. It's

- 10:28:01 20 not an area we've -- we've explored so it's not
  - 21 part of why we -- the signals we use for ads.
  - 22 O. Does Facebook consider whether or not
  - 23 Facebook messenger messages might be considered
  - 24 private by users in making a decision not to use it
- 10:28:18 25 to target users and ads?

- 10:28:22 1 MR. BENJAMIN: Objection to form and
  - 2 scope.
  - 3 THE DEPONENT: That's not the framing
  - 4 we've used. We haven't used messenger content it's
- 10:28:34 5 not something we have explored for -- to
  - 6 incorporate into ads. Like I said, we use
  - 7 interactions with pages and ad content to inform
  - 8 ads interests and then activity generally on the
  - 9 platform.
- 10:28:46 10 Q. (By Ms. Weaver) And I'm trying to
  - 11 understand why Facebook does not use messenger
  - 12 messages to frame interest based targeting of
  - 13 users?
  - 14 MR. BENJAMIN: Objection to form and
- 10:29:05 15 scope.
  - MS. WEAVER: I will ask the question.

- 17 So can you explain why Facebook does not
- 18 use Facebook Messenger information to target users
- 19 with ads.
- 10:29:18 20 MR. BENJAMIN: Objection to form. Asked
  - 21 and answered and outside the scope.
  - 22 THE DEPONENT: It -- it hasn't been an
  - 23 area that we -- we've built out it hasn't been prop
  - 24 to something that we want to do or is valuable. We
- 10:29:30 25 have so far built our interest off of

- 10:29:34 1 engagements -- engagement and interactions with
  - 2 pages and ads and the information people provide
  - 3 us.
  - 4 Q. (By Ms. Weaver) When you say it hasn't
- 10:29:42 5 been proven to be something that we want to do or
  - 6 is valuable, how did Facebook prove that?
  - 7 A. Like I said we haven't.
  - 8 Q. Is -- has Facebook engaged in any any
  - 9 analysis as to whether or not using information
- 10:29:59 10 shared by users in Facebook's messenger would be
  - 11 valuable in identifying their interest?
  - 12 A. No, not that I'm aware of.
  - 13 Q. Do you think a consideration that

- 14 Facebook might engage in is whether or not using
- 10:30:25 15 information from Facebook Messenger messages would
  - 16 individual users privacy expectations?
  - 17 MR. BENJAMIN: Objection to form.
  - 18 THE DEPONENT: You said --
  - 19 MR. BENJAMIN: Objection to form. Calls
- 10:30:36 20 for speculation vague. Outside the scope.
  - 21 THE DEPONENT: Across the board we think
  - 22 about people have specific expectations whether or
  - 23 not this is something that they would understand or
  - 24 not. That's -- that's a consider always.
- 10:30:58 25 Q. (By Ms. Weaver) And I'm asking

- 10:30:59 1 specifically about Facebook Messenger and whether
  - 2 you believe that Facebook considered whether or not
  - 3 allowing information communicated in Facebook's
  - 4 messenger message to be used for advertising or
- 10:31:15 5 other purposes would envied users expectations of
  - 6 privacy?
  - 7 MR. BENJAMIN: Objection to form.
  - 8 THE DEPONENT: We haven't speculated
  - 9 about any specific users and whether or not they
- 10:31:28 10 would find that to be an envision of privacy. We

- 11 use activity on the platform like pages and ads to
- 12 inform interests and the ads people see. And --
- 13 and that -- and that's what transparent about to
- 14 users.
- 10:31:49 15 Q. (By Ms. Weaver) I'm still not getting an
  - 16 answer to the specific question. Can you state one
  - 17 way or other whether or not Facebook considered
  - 18 users expectations of privacy in Facebook's
  - 19 messenger messages and determining whether or not
- 10:32:01 20 to use information contained in them to target
  - 21 users with ads?
  - 22 A. What I'm struggling -- this assumes that
  - 23 this was a specific decision and my point is that
  - 24 it has -- this is -- the content of ads -- of
- 10:32:17 25 messages is not used in ads. We use other activity

- 10:32:22 1 on the platform.
  - 2 Q. And how does Facebook decide what
  - 3 activity on the platform it is using for ads?
  - 4 A. There a number of -- I mean, we -- we are
- 10:32:41 5 trying to build a system that deliver ads that
  - 6 people are interested in. One of the things we've
  - 7 seen that -- that is useful and that we user

- 8 people's engagement with pages and ads and their
- 9 activity that shows what they might want to see
- 10:32:56 10 more content of.
  - 11 And so when we introduce interest as an
  - 12 example, that accurate that engagement to be a
  - 13 topic based and similarly like as product -- as --
  - 14 as teams think about the future of what ads look
- 10:33:16 15 like they would look at target and industry
  - 16 practices and -- and what people want to see and
  - 17 how we can help enable that. I don't think that
  - 18 there's a set framework.
  - 19 Q. Okay. I'm going to move into another
- 10:33:40 20 topic we can take a break now or we can continue
  - 21 it's up to you -- you Ms. Leone I don't know how
  - 22 are feeling?
  - 23 A. I'm happy to keep going.
  - Q. Okay. And I might ask for a break in 20
- 10:33:52 25 minutes but so I don't know?

- 10:33:53 1 MS. WEAVER: Let's break now.
  - THE DEPONENT: Okay.
  - 3 MS. WEAVER: Let's break now and then
  - 4 we'll come back.

- 10:33:58 5 THE DEPONENT: Cool.
  - 6 MS. WEAVER: Great. Thank you.
  - 7 THE VIDEOGRAPHER: Okay. Off the record
  - 8 it's 10:34 a.m.
  - 9 (Recess taken.)
- 10:49:38 10 THE VIDEOGRAPHER: Okay. We are back on
  - 11 the record it's 10:49 a.m.
  - 12 Q. (By Ms. Weaver) Ms. Leone, you are still
  - 13 under oath, correct?
  - 14 A. Correct.
- 10:49:47 15 Q. A quick question about waste for the why
  - 16 am I seeing this tool. Is it your testimony that
  - 17 it lists interests for which have been targeted and
  - 18 then you can opt out?
  - 19 A. Waste shows the criteria that you matched
- 10:50:10 20 from the audience selection that the advertiser
  - 21 made so it will show for that specific ad what you
  - 22 matched and if one of those are interests it would
  - 23 show their and then you would be able to remove
  - 24 yourself from interest.
- 10:50:25 25 Q. So you only remove yourself if you

- 2 MR. BENJAMIN: Objection to form.
- 3 Misstates.
- 4 THE DEPONENT: For why I am seeing this
- 10:50:35 5 the goal of that tool is to provide people and
  - 6 understanding of how the advertiser reached them
  - 7 and so there it is based on -- in that interface
  - 8 it's based on that interest that was matched in ad
  - 9 persons we provide people with the -- the interest
- 10:50:51 10 they are targetable through. And those are -- it's
  - 11 not based on any one specific advertiser using it.
  - 12 Q. (By Ms. Weaver) So a user would have to
  - 13 go to those two different locations, one to disable
  - 14 when they have already been matched and then go to
- 10:51:09 15 a different location to say general categories I
  - 16 maybe don't want to be targeted for; is that right?
  - 17 MR. BENJAMIN: Objection to form.
  - 18 THE DEPONENT: The -- the tools are for
  - 19 provide different purposes because a user might
- 10:51:25 20 want transparency or control or different reasons
  - 21 at different times. When someone sees a ad they
  - 22 might look at the ad and say literally why I am
  - 23 seeing hence the name of the menu that explains
  - 24 that to them. And then the relevant control for
- 10:51:39 25 that transparency. Add persons is a central where

- 10:51:44 1 someone can manage their ad settings and that
  - 2 includes the interest they can be reached through
  - 3 and then -- the ability to remove themselves from
  - 4 so they are serving different purposes which is why
- 10:51:56 5 they look different and entry points to both of
  - 6 them from the ad -- from waste or from our settings
  - 7 to and other minus.
  - 8 Q. (By Ms. Weaver) Why right. I wasn't
  - 9 asking about the purpose. My question is if a
- 10:52:09 10 person wanted to prevent receiving any kinds of ads
  - 11 they would have -- at a minimum to go to these two
  - 12 different locations and review at waist what
  - 13 already occurred to stop it from happening again
  - 14 and then in ad preferences make selections to
- 10:52:26 15 prevent other kinds of advertising; is that fair?
  - MR. BENJAMIN: Objection --
  - 17 THE DEPONENT: No.
  - 18 MR. BENJAMIN: -- to form. Misstates.
  - 19 THE DEPONENT: No, that's -- that's not
- 10:52:35 20 quite what I said.
  - Q. (By Ms. Weaver) I know it's not said but
  - 22 I'm a different question than your last answer. Is
  - 23 it true that to prevent the kind of targeting we

24 have been discussing at a minimum a user would have 10:52:49 25 to go to both of these sites?

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- 10:52:52 1 A. No, they could -- they -- first and
  - 2 foremost, there's no way to turn off on ads on
  - 3 Facebook that's not a setting anywhere. We
  - 4 don't -- we show ads in order to provide a free
- 10:53:06 5 service.
  - 6 Users can manage their ad experience
  - 7 throughout ad preferences and that can be a
  - 8 starting point for managing their ad experience.
  - 9 The reason the purpose for each enter face is
- 10:53:21 10 important is because waist is solving why I am
  - 11 seeing this a solving a very specific user need
  - 12 which is when they see an ad they want to
  - 13 understand how they were reached. They don't have
  - 14 to wait to see an ad and click on why I many a
- 10:53:35 15 seeing this in order to access their ad
  - 16 preferences, which are available to them and where
  - 17 they can manage their -- the settings for their ads
  - 18 as a central hub.
  - 19 Q. Do?
- 10:53:47 20 A. They do not need to access both.

- Q. Does the ad settings list all of the
- 22 60,000 interest categories used for detailed
- 23 targeting?
- 24 A. No.
- 10:53:56 25 MR. BENJAMIN: Objection to form.

- 10:53:57 1 THE DEPONENT: Because --
  - MR. BENJAMIN: Objection to form.
  - THE DEPONENT: No, because they are not
  - 4 all associated with any individual user.
- 10:54:06 5 Q. (By Ms. Weaver) Yes, but in order to
  - 6 proactively say I do not want to receive this ad,
  - 7 wouldn't a user have to be able to opt out of it?
  - 8 MR. BENJAMIN: Objection to form.
  - 9 THE DEPONENT: An interest -- just to
- 10:54:23 10 underlying, the removal from an interest is not
  - 11 about seeing an ad o not it's about the that
  - 12 advertiser could reach you through that interest.
  - 13 I think we discussed before that is something that
  - 14 you are in the interest and you can remove
- 10:54:38 15 yourself. It's not a -- an opt or a future looking
  - 16 for future things that you engage with.
  - 17 Once you have engaged with content and

- 18 you become associated with an interest, someone can
- 19 go and re November themselves from it.
- 10:55:00 20 Q. (By Ms. Weaver) Is there any where on
  - 21 the platform that -- well, strike that. Let's move
  - 22 on.
  - 23 You identified two subcategories of
  - 24 detailed targeted advertising one was interests and
- 10:55:14 25 the second was behavioral, correct?

- 10:55:17 1 A. Behavior.
  - Q. Behaviors what did you mean by behaviors?
  - 3 A. Behaviors are -- are targeting options
  - 4 based on activity on Facebook that indicate -- that
- 10:55:29 5 are -- that are closer to things like people's
  - 6 intent to purchase. The -- he -- way they interact
  - 7 with commercial entities so they are often are they
  - 8 game -- gamers so behavior clusters are just
  - 9 slightly different from interest which are more
- 10:55:46 10 topic based.
  - 11 Q. And how does Facebook infer intent?
  - 12 A. Similar to -- to interest it's based on
  - 13 activity. So as an example I can consistently
  - 14 click on an ad I -- I more likely to click on

- 10:56:04 15 future ads. We would consider my behavior to be
  - 16 different from someone who never engages with one.
  - 17 Q. Can you explain the difference between a
  - 18 behavior and an in terms of?
  - 19 MR. BENJAMIN: Objection.
- 10:56:24 20 Q. (By Ms. Weaver) How Facebook makes the
  - 21 determination for user?
  - MR. BENJAMIN: Objection to form.
  - 23 THE DEPONENT: I think what you are
  - 24 asking is how do we wire these two separate things;
- 10:56:40 25 is that.

- 10:56:40 1 Q. (By Ms. Weaver) I'm just asking what the
  - 2 difference is between them?
  - 3 A. So the difference is that the interest
  - 4 are topic based where as behaviors active based
- 10:56:53 5 categorize the active more so the topic of the
  - 6 engagement.
  - 7 Q. Aren't the topics derived from activity?
  - 8 A. Yes, they -- they are derived from
  - 9 activity, but our -- how we have categorized it so
- 10:57:06 10 as an example here, an interest could be that I
  - 11 engaged with many pages about interior design.

- 12 We'll use that example again which is a silly one.
- 13 And so I -- I'm interested in interior design
- 14 because I can consistently engaged with pages about
- 10:57:24 15 it. A behavior could be that I have -- I -- often
  - 16 will buy something online. So I click and I buy
  - 17 something and so I have an intent to buy things
  - 18 regardless of what the topic was of what I was
  - 19 buying. It's how we tried to distinguish those.
- 10:57:45 20 They represent different dimensions of people's
  - 21 activity and also different dimensions of what --
  - 22 how advertiser might want to define their audience
  - 23 topic based and behavior based.
  - Q. And are there categories of behaviors
- 10:58:01 25 that Facebook uses to define users to make

- 10:58:04 1 available for advertising?
  - MR. BENJAMIN: Objection to form.
  - 3 Misstates.
  - 4 THE DEPONENT: There's the -- the
- 10:58:14 5 targeting options our on categories of behaviors.
  - 6 Q. (By Ms. Weaver) And why what are those
  - 7 targeting options?
  - 8 A. There's a number, so I think I -- I used

- 9 a gamers many example. They are all available in
- 10:58:29 10 ads manager as behaviors.
  - 11 Q. And currently how many behaviors are
  - 12 there?
  - 13 A. There's several hundred.
  - 14 Q. And when were behavior targeting options
- 10:58:44 15 first implement ad targeting Facebook?
  - 16 A. I think a clarification here which is
  - 17 that the categorization like those have been how we
  - 18 bucketed these over time. Any individual option
  - 19 may have been added later on or earlier so I think
- 10:59:04 20 these came to be kind of this type of targeting
  - 21 about 2010 perhaps a little bit earlier.
  - 22 Q. And who specifically was involved in the
  - 23 development of behavior targeting?
  - 24 A. Our ad product teams and their
- 10:59:25 25 cross-functional team.

- 10:59:26 1 Q. Can you identify anyone by name who was
  - 2 involved in the development of behavior targeting?
  - 3 MR. BENJAMIN: Objection to form and
  - 4 scope.
- 10:59:38 5 THE DEPONENT: Not any one individual.

- 6 This is something again it's like been -- been
- 7 iterates on and evolved over many years by very
- 8 large product team.
- 9 Q. (By Ms. Weaver) And who is responsible
- 10:59:48 10 for it today?
  - 11 A. Our ads product team.
  - 12 Q. And who by name in ads product is
  - 13 responsible for the development of the behavior
  - 14 targeting?
- 11:00:00 15 A. The head of our ad targeting team is
  - 16 George camps.
  - 17 Q. And how long has he held that position?
  - 18 A. Several years, I don't know the exact
  - 19 date.
- 11:00:16 20 Q. And do you know who held the position
  - 21 before him?
  - 22 A. He's been involved for a while. I don't
  - 23 know the predecessor before I'm not sure if there
  - 24 was a specific one team or if it was ads product
- 11:00:31 25 which is an org that does this.

- 11:00:38 1 Q. How does Facebook create the targeting
  - 2 option and options in behavior targeting?

- 3 MR. BENJAMIN: Objection to form.
- 4 Misstates.
- 11:00:54 5 THE DEPONENT: We create those based on
  - 6 people's activity.
  - 7 Q. (By Ms. Weaver) Can you explain what you
  - 8 mean?
  - 9 A. I mean that when someone specific
- 11:01:05 10 activity on the platform will associate someone
  - 11 with one of those defined behavior clusters.
  - 12 Q. You previously testified that for
  - 13 interest based identifying a component was demand
  - 14 for the -- the interest.
- 11:01:21 15 Do you recall that?
  - 16 A. Are you being specific to advertiser
  - 17 demand or the --
  - 18 0. Yes?
  - 19 A. The fact that we have seen users engage
- 11:01:28 20 with that content.
  - 21 Q. Right?
  - 22 A. Because.
  - Q. I'm trying to distinguish both the
  - 24 question for behavior targeting options did
- 11:01:34 25 Facebook also consider whether demand by

- 11:01:37 1 advertisers was high?
  - 2 MR. BENJAMIN: Objection to form.
  - 3 THE DEPONENT: Across the broad we would
  - 4 look like things like the market demand and
- 11:01:51 5 industry standards to indicate what are areas that
  - 6 would be useful tools.
  - 7 Q. (By Ms. Weaver) How does Facebook assess
  - 8 market demand and industry standards?
  - 9 A. We can look at other ad products and
- 11:02:07 10 under how those function and what they offer. We
  - 11 had -- we can discuss with -- we can have
  - 12 discussions with people who use our tools and
  - 13 understand where there's a gap.
  - 14 Q. And when you say discussions with people
- 11:02:20 15 who use our tools you mean advertisers?
  - 16 A. Advertisers, ad agencies.
  - 17 Q. Anticipate just for the record, what
  - 18 is -- strike that.
  - 19 You've defined and what advertiser is as
- 11:02:37 20 somebody who places an ad essentially on Facebook;
  - 21 is that fair?
  - 22 A. Uh-huh.
  - Q. So advertiser could also be an app or an
  - 24 app developer or even Facebook under that

11:02:49 25 definition as long as it's somebody who placed an

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- 11:02:51 1 ad on Facebook, right?
  - 2 MR. BENJAMIN: Objection to form.
  - 3 THE DEPONENT: So if -- if a developer
  - 4 has an app and they want to tiff and they create
- 11:03:07 5 and buy an ad would I consider them advertiser.
  - 6 Q. (By Ms. Weaver) Have you used or heard
  - 7 use of the word "partner" at Facebook?
  - 8 THE DEPONENT: Like a capital P partner
  - 9 in sense of.
- 11:03:23 10 Q. (By Ms. Weaver) Yes?
  - 11 A. Designated title.
  - 12 Q. Yeah?
  - 13 A. What do you mean.
  - 14 Q. Facebook partners this is one of
- 11:03:29 15 Facebook's partners would know what that means?
  - 16 A. Yeah. Columbus equally that often means
  - 17 like when we are using it often means that someone
  - 18 is advertiser.
  - 19 Q. Okay. When targeting options for
- 11:03:52 20 behavioral advertising was launched on or around
  - 21 2010 how many categories were there?

- 22 A. I don't know the initial size.
- Q. Do you know again can you describe the
- 24 growth over time or decrease over time?
- 11:04:06 25 A. It -- it would have been several hundred

- 11:04:08 1 thousand oh sorry specific to behaviors?
  - 2 Q. Yes. Yeah?
  - 3 A. That would have been several hundred
  - 4 maybe -- maybe a couple thousand it was a smaller
- 11:04:18 5 number and that's -- that's -- it -- it is similar
  - 6 now as several hundred but, again. Both with like
  - 7 as we have iterates our product we both a had had
  - 8 in and removed.
  - 9 Q. And be how would one create a summary or
- 11:04:39 10 overview of the kinds of behavior targeting options
  - 11 that have been available at Facebook over time?
  - MR. BENJAMIN: Objection to form.
  - 13 THE DEPONENT: There would be -- do you
  - 14 mean at like -- a category by category.
- 11:05:01 15 Q. (By Ms. Weaver) Just yeah an
  - 16 identification of, you know, roughly from years
  - 17 2010 to 2014 here's a list of behavioral targeting
  - 18 options that existed at some point?

- 19 A. Yeah, as I was saying because the system
- 11:05:16 20 has evolve over time. I don't think that there is
  - 21 a high accurate or high accuracy way to reconstruct
  - 22 that. It would have to be an effort to understand
  - 23 maybe this launched at this point so we generally
  - 24 understand that these were the types of segments
- 11:05:33 25 that were available or were deprecated so as an

- 11:05:37 1 example when partner categories were deprecated we
  - 2 know they weren't available in 2019 because they
  - 3 were deprecated in 2018.
  - 4 Q. What did you mean by the word segment
- 11:05:47 5 when you said it?
  - 6 A. That -- apologize interchange with a
  - 7 specific cluster or option within behaviors.
  - 8 Q. What's a cluster or an option?
  - 9 A. And I can choose a specific word here
- 11:06:02 10 whatever and I will stick with that one, but it's
  - 11 for -- when advertiser goes in and selects within
  - 12 the menu of options, the one they have selected so
  - 13 I will use option moving forward and it's the same
  - 14 thing as a specific interest is one option. A
- 11:06:21 15 specific behavior segment is one option.

- 16 Q. And what are the specific kinds of
- 17 behaviors that are the data points used to create
- 18 targeting options?
- 19 A. So we take to clarify we take activity on
- 11:06:43 20 Facebook. The information people provide us. And
  - 21 that can associate and that is how they become
  - 22 associated with a behavior option that then is also
  - 23 a targeting parameter for advertisers to select.
  - Q. And what specific activity on Facebook?
- 11:07:03 25 A. Like I was saying, it could be page or

- 11:07:05 1 ads interactions. Information they provide us on
  - 2 their profile. The way they engage with specific
  - 3 types of content so if they kindly click as an
  - 4 example or if they are -- they don't click, if they
- 11:07:20 5 are -- those are some examples of activity but it's
  - 6 how people interact on the platform.
  - 7 Q. Does it include how they interact with
  - 8 their friends?
  - 9 MR. BENJAMIN: Objection to form. Vague.
- 11:07:41 10 THE DEPONENT: I will give an example
  - 11 because I think that help ground and let me know if
  - 12 that's close to what you -- what you mean. We --

- 13 an example of people provide in our profile is
- 14 their hometown and they -- we also can say their
- 11:07:58 15 family a relationship. So they can say. I am a --
  - 16 I'm engaged or I'm in a relationship. We could
  - 17 know from that information, that they are in a
  - 18 relationship and that would be what -- a type of
  - 19 targeting we offer. So that's an example I'm not
- 11:08:18 20 sure gets what quite you meant by friends
  - 21 interactions where you say I'm engaged you might
  - 22 also engaged who you engaged to that is a
  - 23 connection between people. And is something we use
  - 24 for ads.
- 11:08:33 25 Q. (By Ms. Weaver) Yeah.

- 11:08:33 1 So you identified two categories. You
  - 2 said one activity and two info they provide. I
  - 3 wasn't asking about info you provided you just
  - 4 discussed it so set that aside.
- 11:08:43 5 I'm asking very specifically, what
  - 6 activity on Facebook does Facebook use to create
  - 7 the targeting options for behavioral advertising?
  - 8 MR. BENJAMIN: Objection to form
  - 9 argumentative.

- 11:08:58 10 Q. (By Ms. Weaver) It's not limited just
  - 11 groups and pages is it?
  - 12 A. It's not -- and I --
  - MR. BENJAMIN: Sorry, Bella.
  - 14 Objection to form.
- 11:09:07 15 THE DEPONENT: Evening it's not abuse
  - 16 example and another type of activity is how someone
  - 17 engages on the platform for example, they set a --
  - 18 a life event or they update their relationship
  - 19 status.
- 11:09:24 20 Q. (By Ms. Weaver) Does it include whether
  - 21 or not for example they respond to certain kinds of
  - 22 content posted by friends?
  - 23 MR. BENJAMIN: Objection to form. Vague.
  - THE DEPONENT: Yes.
- 11:09:40 25 Q. (By Ms. Weaver) Does it include for

- 11:09:40 1 example, how often they use Facebook Messenger?
  - 2 A. The -- again -- similar to whether or
  - 3 not -- like if you ever used Facebook Messenger,
  - 4 yes could be something we use for ads.
- 11:10:01 5 Q. Does it include the content of users
  - 6 posts?

- 7 A. In messaged pages or generally?
- Q. Both.
- 9 A. Like I said before.
- 11:10:15 10 MR. BENJAMIN: Objection to form.
  - 11 THE DEPONENT: We don't use content in
  - 12 message threads for ads. On posts the content, for
  - 13 example if I engaging if I post to a page that
  - 14 could be used, if I engage with posts and the
- 11:10:36 15 content of those posts could be used, yes.
  - 16 Q. (By Ms. Weaver) And that's without
  - 17 regard to whether or not that content was marked
  - 18 private or public, correct?
  - 19 MR. BENJAMIN: Objection to form. Asked
- 11:10:46 20 and answered. Vague.
  - 21 THE DEPONENT: We don't have a
  - 22 distinction in that manner of public versus private
  - 23 that's not -- that doesn't quite translate into our
  - 24 product in that manner.
- 11:11:00 25 Q. (By Ms. Weaver) And that's true for the

- 11:11:01 1 class period for the target options for behavior
  - 2 advertising correct?
  - 3 MR. BENJAMIN: Objection to form.

- 4 THE DEPONENT: Yes.
- 11:11:15 5 Q. (By Ms. Weaver) And you've identified
  - 6 two categories users activity -- well strike that.
  - 7 Other than the content of Facebook's
  - 8 messenger is there any other activity on Facebook
  - 9 that users engage in that is not used for the
- 11:11:33 10 creation of targeting options for behavior
  - 11 targeting?
  - MR. BENJAMIN: Objection to form.
  - 13 THE DEPONENT: I -- I -- I'm not sure
  - 14 there's a way to categorize all of the data we
- 11:11:53 15 don't use. I'm -- we can -- discussing the
  - 16 activity that is used, I don't know the full extent
  - 17 of our entire product and all the data we have to
  - 18 define what we don't use.
  - 19 Q. (By Ms. Weaver) But as sit here today
- 11:12:11 20 you can't think of another category other than the
  - 21 content of Facebook message that is categorically
  - 22 not used for behavior tar target users is that
  - 23 fair?
  - 24 MR. BENJAMIN: Objection to form.
- 11:12:23 25 THE DEPONENT: No, another example is

- 11:12:26 1 when someone entered a security phone number we do
  - 2 not use that for ads.
  - 3 Q. (By Ms. Weaver) Okay. Anything else?
  - 4 A. Not that I can come up with off -- off
- 11:12:39 5 the cuff again it's tough to think potentially all
  - 6 activity and then carve it out UID know do use for
  - 7 ads which I describe described.
  - 8 Q. Now you've described. So other than
  - 9 activity. And other than the information that
- 11:12:57 10 users provide in sign up for example, is there any
  - 11 other data that Facebook uses to create wheelchair
  - 12 tar targeting options?
  - 13 A. So over this period, I think we are
  - 14 familiar with partner categories, that's -- those
- 11:13:18 15 were created with data brokers information. We --
  - 16 there's also activity off of Facebook. So from
  - 17 apps and websites which could be used for -- could
  - 18 be used in -- in a targeting option.
  - 19 Q. Anything else you can think of?
- 11:13:39 20 A. No, I mean those are the classes of data
  - 21 or the categories of data that we use.
  - Q. How does Facebook use users activity off
  - 23 of Facebook to create targeting options used to
  - 24 target users by third parties?
- 11:13:57 25 A. Whether we were discussing custom

- 11:14:00 1 audiences this is an example of that. So an -- our
  - 2 business tools a website owner and an app owner can
  - 3 use those tools to send information to Facebook
  - 4 about a visit to their website. That information
- 11:14:16 5 can help them then reach back out to people who I
  - 6 have already visited their website and we use it
  - 7 also to personalize ads.
  - 8 Q. Okay. That's custom audiences. You said
  - 9 barely targeting is in a different bucket, right?
- 11:14:31 10 A. Apologies. Behaves a specific targeting
  - 11 option we provide behavioral target users often
  - 12 used a way personalize it sound lie was responding
  - 13 to the second. For behaves we also have used
  - 14 offsite engagement in those. That -- over -- over
- 11:14:51 15 the course of this period. It could be very
  - 16 similar to the options -- to -- what I assessor
  - 17 saying about if you consistently purchase on --
  - 18 online that could be something that informs one of
  - 19 those options.
- 11:15:05 20 O. And does Facebook collect the information
  - 21 about users off platform activity through the use
  - 22 of cookies or other trackers?

23 MR. BENJAMIN: Objection to form and

24 scope.

11:15:27 25 THE DEPONENT: For -- for ad use we base

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- 11:15:30 1 it off of the use of our business tools, so our
  - 2 pixel and app SDK.
  - 3 Q. (By Ms. Weaver) And for the record what
  - 4 is pixel?
- 11:15:42 5 A. Pixel is a cookie that is placed on a
  - 6 website that communicates information back to
  - 7 Facebook by the website owner.
  - 8 Q. And when was pixel first in use?
  - 9 A. 20 -- for ads 2014.
- 11:15:59 10 Q. Was it in use not for ads prior to that?
  - 11 A. It was, it was.
  - 12 MR. BENJAMIN: Objection -- objection to
  - 13 form and scope.
  - 14 THE DEPONENT: It was something that
- 11:16:10 15 launched prior to that. But use for ads in 2014.
  - 16 Q. (By Ms. Weaver) And do you know what it
  - 17 was used for prior to being used for ads?
  - 18 MR. BENJAMIN: Objection to scope.
  - 19 THE DEPONENT: It was used for website

- 11:16:26 20 owners to do analytics and understand more about
  - 21 how their website was functioning. I don't know
  - 22 more generally how -- or -- or in other specifics
  - 23 of how it was used.
  - Q. (By Ms. Weaver) And pixel in use today;
- 11:16:45 25 is that right?

- 11:16:47 1 A. Yes, correct.
  - Q. And you referred to app SDK; is that
  - 3 right?
  - 4 A. Yes.
- 11:16:57 5 O. What is that?
  - 6 A. Similar, it's a way for -- a developer a
  - 7 app owner to provide information back to Facebook
  - 8 about specific events in their app.
  - 9 Q. And what specific kinds of information do
- 11:17:22 10 pixel and app SDK communicate about users off
  - 11 platform activity that is then used to target them
  - 12 in wheelchair part of the options?
  - MR. BENJAMIN: Objection to form.
  - 14 THE DEPONENT: So a -- a -- it it -- I'm
- 11:17:51 15 going to answer this in terms of how pixel
  - 16 functions and I think that is.

- 17 Q. (By Ms. Weaver) Okay.
- 18 A. Probably what we are getting to.
- 19 The -- when -- the way a pixel works is
- 11:18:03 20 that the business tool or the person who is using
  - 21 our business tool so the website owner sets it up
  - 22 and they translate back to us contact information
  - 23 and event data.
  - 24 The contact information is an identifier
- 11:18:17 25 which helps us understand who took that action and

- 11:18:21 1 we hash and match that on our platform.
  - The event is about a check out. Like
  - 3 they choose what -- what he inventor they are
  - 4 hoping to -- to have it at the pixel transmit back.
- 11:18:33 5 That could be something like they went to our menu.
  - 6 They looked at our hours of operation. They
  - 7 added -- added something to the cart checked out.
  - 8 We would receive both of those. And the
  - 9 event information is what helps us understand the
- 11:18:50 10 activity and could help personalize an ad.
  - 11 O. So for example, if somebody goes onto a
  - 12 website and puts something in a cart but doesn't
  - 13 check outdoes Facebook still receive the

- 14 information about what was sitting in the cart?
- 11:19:05 15 MR. BENJAMIN: Objection to form.
  - 16 THE DEPONENT: They are different
  - 17 concepts the website owner has sent us specifically
  - 18 an ad to cart event. They could separately send us
  - 19 a check out I vent those are -- those are distinct.
- 11:19:19 20 O. (By Ms. Weaver) Okay. But the answer is
  - 21 yes Facebook could receive the information about
  - 22 what was sitting in the cart but not purchased; is
  - 23 that right?
  - 24 MR. BENJAMIN: Objection to form
- 11:19:28 25 misstates.

- 11:19:32 1 THE DEPONENT: It is not about
  - 2 understanding the -- the -- the flow and all of the
  - 3 purchases it's about the event that the website
  - 4 owner chooses to send back and the information they
- 11:19:44 5 include and sending that back to us.
  - 6 Q. (By Ms. Weaver) Okay. And I'm being
  - 7 very granular we but one of the events that
  - 8 advertisers choose to send back is whether or not
  - 9 something is sitting in a cart, but did not check
- 11:19:56 10 out; is that true?

- MR. BENJAMIN: Objection to form.
- 12 THE DEPONENT: It's -- it's not that they
- 13 are send us back didn't check out. They are send
- 14 us back that someone added something to the cart
- 11:20:10 15 it's -- it's a moment an event that is advertising
  - 16 remembered not a subtract of whether or not check
  - 17 out happened.
  - 18 O. (By Ms. Weaver) I understand. We are
  - 19 getting host a little bit systematic?
- 11:20:23 20 A. Okay.
  - Q. Let me ask it this way, if I looked up my
  - 22 profile at Facebook and had the internal tools
  - 23 could I see instances of where I had items in my
  - 24 cart but they weren't purchased?
- 11:20:37 25 MR. BENJAMIN: Objection to form.

- 11:20:38 1 THE DEPONENT: Can you collar my what you
  - 2 mean your -- your profile and internal tools.
  - 3 Q. (By Ms. Weaver) Okay. For -- let me
  - 4 just ask this.
- 11:20:51 5 Does Facebook process information about
  - 6 users that would reflect instances where something
  - 7 was sitting in their chart but not purchased?

- 8 MR. BENJAMIN: Objection to form.
- 9 THE DEPONENT: Not in the way that I
- 11:21:05 10 think you have conceptualized it.
  - 11 Q. (By Ms. Weaver) Okay.
  - 12 A. Which is that there is a -- this item
  - 13 was -- was not purchased on a website. We know if
  - 14 someone specifically -- if -- if a website owner
- 11:21:18 15 passed us back pixel, that the check out pixel was
  - 16 fired we would know that.
  - 17 If the information passed back to us was
  - 18 that the ad to cart pixel was fired we would know
  - 19 that.
- 11:21:30 20 Q. Okay.
  - 21 A. That's all I was asking. Like -- okay,
  - 22 that's good.
  - 23 O. Does Facebook inform users which third
  - 24 parties are collecting information about them of
- 11:21:59 25 their off platform activity through pixel and app

- 11:22:04 1 SDK?
  - 2 MR. BENJAMIN: Objection to form and
  - 3 scope.
  - 4 THE DEPONENT: The pixel and app SDK and

- 11:22:23 5 the -- and the -- the websites and apps that use
  - 6 those are shown to people in OFA which is our off
  - 7 Facebook activity tool.
  - 8 Q. (By Ms. Weaver) Are all of them in OFA?
  - 9 A. This a little bit outside of ads. So
- $11:22:40\ 10$  yes, my understanding is that they are. But not my
  - 11 expertise.
  - 12 Q. And how long is OFA been functional?
  - MR. BENJAMIN: Objection to form.
  - 14 THE DEPONENT: I believe we launched OFA,
- 11:23:06 15 my personal recollection that we launch between
  - 16 2016 and 2018 but, again, somewhat outside the
  - 17 scope of ads.
  - 18 Q. (By Ms. Weaver) Okay. So we've now
  - 19 identified three categories of data the can be used
- 11:23:19 20 to create the targeting categories or options in
  - 21 behavior advertising and that is activity on
  - 22 Facebook?
  - 23 A. Information users provide and off
  - 24 platform activity. Is there any other categories
- 11:23:34 25 of data not include that we should be discussing.

- Q. Okay. Once Facebook has the data how
- 3 does it create the inference of an intent or a
- 4 behavior?
- 11:23:55 5 MR. BENJAMIN: Objection to form.
  - 6 THE DEPONENT: So I think important to
  - 7 understand here what trying to do if understand if
  - 8 someone previous engagement or interest or behavior
  - 9 would predict their future engagement or interest
- 11:24:15 10 in behavior so to draw that out that line pretty
  - 11 clearly if I can consistently click on ads, we
  - 12 said -- that would be an indication to us that I am
  - 13 likely to click on ads.
  - 14 So that is an example of where we are
- 11:24:31 15 taking someone previous behavior to -- to
  - 16 understand their future behavior it's -- it's -- I
  - 17 think that answer your questions just in terms of
  - 18 how -- it's not like a labeling exercise. It is a
  - 19 question of you -- you've previously ebb engaged in
- 11:24:52 20 that way and that helps how you might engage in
  - 21 the --
  - 22 Q. (By Ms. Weaver) Is Facebook using
  - 23 algorithms to predict the future behavior?
  - 24 MR. BENJAMIN: Objection to form.
- 11:25:05 25 THE DEPONENT: Our ad delivery does

- 11:25:06 1 include algorithms they are machine learning
  - 2 classifiers that help us estimate people's future
  - 3 behavior.
  - 4 Q. (By Ms. Weaver) What is machine
- 11:25:20 5 learning.
  - 6 THE DEPONENT: Machine learning is -- a
  - 7 forge of programmatically at least in the context
  - 8 of ads of programmatically creating this
  - 9 prediction. So within our ad delivery we base it
- 11:25:38 10 object people's activity to understand their future
  - 11 potentially engagement.
  - 12 Q. (By Ms. Weaver) And is this kind of
  - 13 analysis logged at Facebook with regard to users?
  - 14 A. Can you explain what you mean by "this
- 11:25:55 15 analysis."
  - 16 Q. Right.
  - 17 You engage in a purchase and the
  - 18 algorithm says it needs that you are like lying to
  - 19 else ever engage in a different kind of purpose in
- 11:26:09 20 ten minutes is that logged somewhere that
  - 21 prediction?
  - 22 MR. BENJAMIN: Objection -- objection to
  - 23 form.

THE DEPONENT: We -- so I think there are 11:26:20 25 a few -- a few important pieces. Machine learning

- 11:26:23 1 takes into account. It's not a one to one
  - 2 deterministic rule which is why it's machine learn.
  - 3 So it's taking into account, your activity and --
  - 4 and that helps us develop the -- in this example we
- 11:26:40 5 call it the estimated action rate which is whether
  - 6 or not you will engage in the way -- in an ad.
  - We -- we log the -- the activity that's
  - 8 feeding into because that's just the activity that
  - 9 we have anyway.
- 11:27:02 10 And we -- we know which ad we showed
  - 11 someone so we know the output.
  - 12 Q. (By Ms. Weaver) Let's talk about the
  - 13 output.
  - 14 Facebook makes a prediction what does it
- 11:27:29 15 do with that that prediction?
  - MR. BENJAMIN: Objection -- objection to
  - 17 form.
  - 18 THE DEPONENT: I think it's helpful to
  - 19 maybe expand to ads. So advertiser creates the ad
- 11:27:38 20 they give us the content. They set the parameters

- 21 for their audience and their bid. The bid is how
- 22 much they are willing to pay to show that ad.
- 23 We then move it into our ad ranking or
- 24 the optimization portion where we take the eligible
- 11:27:55 25 audience we say which ad should Bella see in order

- 11:28:00 1 to determine that we -- we are using the total
  - 2 value equation and that is the bid from the
  - 3 advertiser, the estimated action rate that I will
  - 4 actually want to see this and engage with this ad
- 11:28:14 5 and the ad quality, those are the machine learning
  - 6 components and then the output is whether -- which
  - 7 ad I'm shown all of the ads that eligible to see in
  - 8 that moment.
  - 9 Q. (By Ms. Weaver) So does Facebook log
- 11:28:31 10 which ads a specific user is shown?
  - 11 A. Yes.
  - 12 Q. And when did Facebook start logging what
  - 13 ads a specific user is shown?
  - 14 A. I believe that we have -- we have --
- 11:28:50 15 in -- we have logged that since we started to show 16 ads.
  - 17 Q. Since 2007, right?

- 18 A. Yes.
- 19 Q. And does Facebook link the advertisement
- 11:29:07 20 shown to a specific user and also log the behavior
  - 21 that triggered the ad?
  - MR. BENJAMIN: Objection to form.
  - 23 THE DEPONENT: What I was saying before
  - 24 is it's not a one to one relationship. It's not a
- 11:29:22 25 singular behavior and there wouldn't be a one

- 11:29:25 1 trigger to log with that.
  - Q. (By Ms. Weaver) Is there -- are there
  - 3 logs that reflect series of activities that also
  - 4 correlate in time to the ads Facebook is showing
- 11:29:40 5 them?
  - 6 MR. BENJAMIN: Objection to form.
  - 7 THE DEPONENT: Again the assumption
  - 8 there's like -- a is separate set of activity from
  - 9 what just -- what we use for ads as people's
- 11:29:54 10 activity and then that is how our machine learning
  - 11 determines if this would be of interest and then
  - 12 determines the ad to show. It's not that there is
  - 13 like cherry picked activity that would -- is one to
  - 14 one relationship with showing any given ads. So

- 11:30:11 15 that's not -- does toe reflex how machine learn
  - 16 works in order to login that manner.
  - 17 Q. (By Ms. Weaver) Right I understand I
  - 18 mean what trying understand though, at some point
  - 19 machine learning is learning and it's saying this
- 11:30:24 20 activity -- X, right?
  - 21 MR. BENJAMIN: Objection to form and
  - 22 scope.
  - 23 THE DEPONENT: Do you mean a specific
  - 24 activity or Bella has -- has -- this is -- these
- 11:30:37 25 are Bella interactions over time. And we think it

- 11:30:40 1 means that this would be an ad of interest.
  - Q. (By Ms. Weaver) Exactly?
  - 3 A. Right. So again we know activity that is
  - 4 logged. We know which ads I -- I have -- we know
- 11:30:51 5 the target of ads and then we know the ad I'm shown
  - 6 so we know the output.
  - Q. So the question is does Facebook maintain
  - 8 any kind of record or log of in a given time period
  - 9 these are the activities and these are the ads. We
- 11:31:09 10 maintain records of people's activity and maintain
  - 11 records of or we store the ads people's are shown.

- 12 O. And doesn't Facebook also maintain some
- 13 kind of record of the special saws that gets from A
- 14 to B?
- 11:31:27 15 MR. BENJAMIN: Objection to form.
  - 16 THE DEPONENT: I think that is what I
  - 17 described. There isn't a way to -- like there
  - 18 isn't storage of a specific trigger because that's
  - 19 not how machine learning works.
- 11:31:42 20 Q. (By Ms. Weaver) Right. I understand
  - 21 what you are saying.
  - 22 I will come back to that.
  - 23 Where are the logs that you just
  - 24 described with regard to the activity in the ads
- 11:31:55 25 maintained?

- 11:32:00 1 A. Ads people see is success that we shore
  - 2 people activity is also something we store
  - 3
  - 4 Q. Is it stored anywhere else?
- 11:32:11 5 MR. BENJAMIN: Objection to form. Vague.
  - 6 Compound.
  - 7 THE DEPONENT: The ads information is
  - 8 stored . That's the database that -- that's

- 9 holds it and that's the same for the activity.
- 11:32:25 10 There -- other -- other systems might read from it
  - 11 so example for to render ads reporting. In ads
  - 12 manager we would read from -- from those databases.
  - Q. (By Ms. Weaver) Are you familiar with
  - 14 the Download Your Information tool?
- 11:32:43 15 A. I'm familiar that it exist and we provide
  - 16 access to information there.
  - 17 Q. Does it read from these tables do
  - 18 you know?
  - 19 A. I.
- 11:32:56 20 MR. BENJAMIN: Objection -- objection to
  - 21 form and scope.
  - 22 THE DEPONENT: Unfortunately I don't know
  - 23 as part of -- of my ads expertise.
  - Q. (By Ms. Weaver) Okay.
- 11:33:19 25 MS. WEAVER: I think we the take -- a

- 11:33:21 1 break now let's go over the record.
  - THE VIDEOGRAPHER: Okay. We are off the
  - 3 record it's 11:33 a.m.
  - 4 (Recess taken.)

- 6 test test test test test
- 7 THE VIDEOGRAPHER: Okay. We are back on
- 8 the record it's 12:24 p.m.
- 9 Q. (By Questioner) Hi Ms. Leone did you
- 12:24:23 10 have a good lunch?
  - 11 A. I did thank you.
  - 12 O. Or lunch equivalent.
  - 13 I'm going to show what we mark as -- give
  - 14 me a moment. 656.
- 12:24:39 15 (Exhibit 656 was marked for
  - 16 identification by the court reporter and is
  - 17 attached hereto.)
  - 18 MS. WEAVER: And while we are waiting for
  - 19 it to load.
- 12:24:48 20 Q. (By Ms. Weaver) Do you recall when ad
  - 21 preferences was created, so that users could see or
  - 22 try to control what ads were presented to them?
  - 23 A. Ad preferences launched in 2014.
  - Q. Okay. I see. Okay. Do we have
- 12:25:29 25 Exhibit 656 up. Yes, I have it up.

- 12:25:31 1 Q. And looking at Exhibit 656, do you know
  - 2 what it is?

- A. It is a Newsroom blog post from 2019
- 4 announcing initials to some of our transparency
- 12:25:43 5 interfaces.
  - 6 Q. Who is a Newsroom blog post?
  - 7 A. A Newsroom blog post -- Newsroom is what
  - 8 we call the portion of our website where anyone can
  - 9 navigate on the Internet that we make
- 12:26:01 10 announcements.
  - 11 Q. And looking at Exhibit 656, it bears a
  - 12 date of July 11th, 2019?
  - 13 A. Yes.
  - 14 Q. Why did you review this particular
- 12:26:16 15 document?
  - MR. BENJAMIN: Objection to form.
  - 17 THE DEPONENT: This is part of our
  - 18 evolution of the tools around ads targeting an ads
  - 19 ranking in this case. The transparency tools and
- 12:26:32 20 so I wanted to be sure that I understood what had
  - 21 changed in the moment. And if I could -- do you
  - 22 mind.
  - Q. (By Ms. Weaver) Of course.
  - 24 A. Make sure and read.
- 12:26:42 25 O. Yeah.

- 12:26:43 1 A. Sorry. Yeah, this was -- these were
  - 2 updates to waist and part of prep I was reviewing
  - 3 many of the updates that we have made and generally
  - 4 understanding where -- when those were.
- 12:27:12 5 Q. So this disclosure does not relate to ads
  - 6 sent to users because of behavioral targeting
  - 7 actions right?
  - 8 MR. BENJAMIN: Objection to form.
  - 9 THE DEPONENT: Can you clarify when you
- 12:27:31 10 say behavioral what -- what you mean.
  - 11 Q. (By Ms. Weaver) With the data sources
  - 12 that are -- that are -- the bases of the
  - 13 information that's used for ad interest and then
  - 14 there's a different dataset that is is the source
- 12:27:49 15 for behaviors, correct?
  - 16 MR. BENJAMIN: Objection to form.
  - 17 Misstates W it sounds like you are differentiating
  - 18 the activity more so than the fact that it's just a
  - 19 separate set of options in the -- I for advertisers
- 12:28:08 20 and that's meant to reflect how they organize and
  - 21 how they can select their audience and that's
  - 22 really the big distinction between the two.
  - Q. (By Ms. Weaver) Okay. Well, looking at
  - 24 Exhibit 656 and turning to the page that's at --

12:28:42 25 ending in nine -945. Yes, I so.

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- 12:28:53 1 Q. We are updating ad preferences show more
  - 2 about businesses that uploads lists with your
  - 3 information.
  - 4 Do you see that?
- 12:29:07 5 A. Yes, sorry I'm not sure if it was for
  - 6 others as well, that's actually on the -- on
  - 7 the -944 for me.
  - 8 Q. I am sorry, so --
  - 9 A. Okay. I just want to be sure I'm at the
- 12:29:17 10 right spot yes, I see.
  - 11 Q. So does Facebook provide businesses with
  - 12 lists that they can upload about information about
  - 13 users?
  - 14 A. No.
- 12:29:26 15 Q. So what does this mean when it says "we
  - 16 are also updating ad preferences to show more about
  - 17 businesses that upload lists with your
  - 18 information"?
  - 19 A. This refers to custom audiences the
- 12:29:40 20 customer list form of custom audiences.
  - Q. Okay. And so looking at Exhibit 656, is

- 22 this meant -- what is the purpose of this blog?
- 23 A. This was to --
- 24 MR. BENJAMIN: Objection -- objection to

12:29:54 25 form.

135

- 12:29:55 1 THE DEPONENT: This was to announce
  - 2 updates to waist and ad preferences that would help
  - 3 users understand when an advertiser has uploaded a
  - 4 customer list in order to reach them with an ad.
- 12:30:08 5 Q. (By Ms. Weaver) Okay. Well look at the
  - 6 page ending --943?
  - A. Yes.
  - Q. Where it says first, we'll show people
  - 9 more reasons why they are seeing an ad on Facebook
- 12:30:19 10 in the past why I am seeing this ad highlighted one
  - 11 or two of the most relevant reasons such as
  - 12 demographic information or you may have visited a
  - 13 website. Now you will see more detailed targeting
  - 14 including the interest or categories that match you
- 12:30:34 15 with a specific ad. It will also be clear where
  - 16 that information came from e.g., the website you
  - 17 may have vested or page may have liked height
  - 18 controls to easy here adjust your experience.

- 19 Do you see that?
- 12:30:47 20 A. Yes.
  - Q. So when it's referring to interest or
  - 22 categories that match you with a specific ad that
  - 23 is referring to interest advertising, right?
  - 24 MR. BENJAMIN: Objection to form. Vague.
- 12:31:04 25 THE DEPONENT: So reading this blog

- 12:31:06 1 Post-it -- it is referring to the targeting
  - 2 operations that are under detail targeting so
  - 3 interest targeting operations and -- and other
  - 4 categories which are the other operations within
- 12:31:18 5 detailed targeting.
  - 6 Q. (By Ms. Weaver) Okay. And then a
  - 7 little -- little later you've said that what -- on
  - 8 the next page pages four and five of the document,
  - 9 it discusses custom advertising; is that right?
- 12:31:33 10 MR. BENJAMIN: Objection to form.
  - 11 Misstates.
  - 12 THE DEPONENT: It also notes that we --
  - 13 making an additional update to ad preferences and
  - 14 that is related to customer lists.
- 12:31:43 15 Q. (By Ms. Weaver) And why doesn't this

- 16 document discuss the behavioral targeting -- the
- 17 targeting for behavior that we spent so much time
- 18 discussing before the break?
- 19 MR. BENJAMIN: Objection to form.
- 12:31:58 20 Mischaracterizes.
  - 21 THE DEPONENT: The so I didn't write this
  - 22 blog post so the wording here I think it's hard to
  - 23 speculate exactly how they drafted this. But that
  - 24 is what is meant by the more -- you will see more
- 12:32:13 25 detailed targeting including the interest or

- 12:32:16 1 categories that matched with a specific ad that
  - 2 includes those behaviors and specifically the
  - 3 behaviors that the advertiser chooses when creating
  - 4 their desired audience.
- 12:32:31 5 Q. (By Ms. Weaver) Do you know why the word
  - 6 behaviors is not used in this disclosure?
  - 7 MR. BENJAMIN: Objection to form and
  - 8 scope.
  - 9 THE DEPONENT: I can't tell you how it
- 12:32:44 10 was drafted this way. But detailed targeting
  - 11 interests or categories we often talk about
  - 12 targeting as categories and this -- this alliance

- 13 with that, it doesn't use the -- the exact same
- 14 indemnify nomenclature, but.
- 12:33:00 15 Q. (By Ms. Weaver) Or the word behavior.
  - 16 Do you know if Facebook uses the word behavior in
  - 17 its privacy policy or data use policy?
  - 18 MR. BENJAMIN: Objection.
  - 19 Q. (By Ms. Weaver) The kinds of inferences
- 12:33:10 20 drawn about them based on their activity on and off
  - 21 the platform?
  - MR. BENJAMIN: Excuse me, I didn't mean
  - 23 to interrupt, I am sorry.
  - 24 Objection to form and scope.
- 12:33:20 25 THE DEPONENT: I don't know if the

- 12:33:22 1 specific word is used. But we do use our word in
  - 2 it's ad product when someone goes to create an ad.
  - 3 Q. (By Ms. Weaver) You use it facing
  - 4 advertiser but not facing users; is that right?
- 12:33:34 5 A. Again --
  - 6 MR. BENJAMIN: Objection to form.
  - 7 THE DEPONENT: -- that's not quite right.
  - 8 I said I don't know for certain if it's in or
  - 9 policy or data policy. But it is displayed to

- 12:33:44 10 users in other transparency interfaces such as ad
  - 11 preferences.
  - 12 Q. (By Ms. Weaver) You are -- you are a
  - 13 privacy and policy manager; is that right and you
  - 14 have been since 2019?
- 12:33:56 15 A. Correct.
  - 16 Q. And what are your duties and
  - 17 responsibilities?
  - 18 A. I work with our --
  - 19 MR. BENJAMIN: Objection -- sorry.
- 12:34:04 20 THE DEPONENT: Sorry, that was my fault.
  - 21 MR. BENJAMIN: Objection to form and
  - 22 scope.
  - You can answer.
  - 24 THE DEPONENT: I work with our product
- 12:34:13 25 teams as they develop new products and we work to

- 12:34:17 1 ensure that those would -- would be in inline with
  - 2 what we think our privacy principle should be and
  - 3 also conversations that we had external restraining
  - 4 order groups and feedback generally about the
- 12:34:30 5 products.
  - 6 Q. (By Ms. Weaver) And does that include --

- 7 did the products include behavior targeting?
- 8 A. I cover ad targeting, yes.
- 9 Q. Earlier you indicated that there might be
- 12:34:43 10 a difference in your mind between behavioral
  - 11 advertising targeting and behavioral targeting; is
  - 12 that fair?
  - 13 A. I -- I think there's -- there's the
  - 14 product of behavioral operations that are in our
- 12:34:59 15 targeting tools so what we provide to advertiser.
  - 16 I think there can be -- people use behavioral
  - 17 targeting to speak generally about post
  - 18 personalization about the use of specifically
  - 19 offsite data and so, I think -- it's like capital B
- 12:35:19 20 behavioral a thing we produce or we provide in our
  - 21 tool versus the concept of behavioral targeting and
  - 22 that's the distinction I see, but when were
  - 23 discussing it earlier I think those got a little
  - 24 bit mixed probably.
- 12:35:33 25 Q. Okay. And what is OBA?

- 12:35:36 1 A. OBA a closer to that the second it's
  - 2 online behavioral advertising. It is commonly
  - 3 meant to mean use of -- of activity off of the

- 4 platform to inform advertising.
- 12:35:52 5 Q. So is it fair to say that like OBA or
  - 6 advertising is an industry term of art when you've
  - 7 been talking about the player it's a specific
  - 8 Facebook product.
  - 9 A. Yes, it is a industry term of art. When
- 12:36:09 10 were specifically talking about the behaviors the
  - 11 targeting options I dressed those when were talking
  - 12 about how we used activity generally it would also
  - 13 related to the industry term of online behavioral
  - 14 advertising.
- 12:36:23 15 Q. (By Ms. Weaver) Okay. And then what is
  - 16 political targeting?
  - 17 MR. BENJAMIN: Objection to form.
  - 18 THE DEPONENT: Political targeting is
  - 19 just the -- I guess I'm -- I might need to put that
- 12:36:45 20 back to you.
  - 21 Are you thinking in the context of our
  - 22 tools?
  - Q. (By Ms. Weaver) I'm just thinking in
  - 24 general, do you know what political targeting
- 12:36:54 25 means?

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12:36:56 1
                      MR. BENJAMIN: Objection to form and
          2 scope.
                       THE DEPONENT: To me that means the
          4 options we provide for advertisers to create their
12:37:04 5
            audience that are related to politics.
                 Q.
                      (By Ms. Weaver) Okay.
          6
          7
                      MS. WEAVER: Why don't we mark exhibit
            3 because of this scope objection.
          9
                      MS. WEAVER: And for the record Exhibit 3
            [sic] is a letter sent to me from Mr. Benjamin on
             July 29th, 2022.
         11
         12
                       (Exhibit 657 was marked for
            identification by the court reporter and is
         13
            attached hereto.)
12:37:31 15
                       (By Ms. Weaver) And when it's up I will
                  Q.
             ask to turn to the second page and I will read into
         17
            the record when you have it up.
         18
                       Do you have it available counsel?
         19
                 Α.
                      Yes.
12:37:47 20
                      It says "Ms. Leone will be prepared to
                 Q.
```

- discuss the targeting and audience selection
  options available to advertisers including with
  respect to political targeting segments which we
  understand to be of interest to plaintiffs."
- 12:38:00 25 Do you see that?

- 12:38:08 1 A. Yes.
  - Q. So what are political targeting segment?
  - A. It's what I was describing as the options
  - 4 that we provide an advertiser to define their
- 12:38:18 5 audience.
  - 6 MS. WEAVER: So the scope objection was
  - 7 meritless.
  - 8 Q. (By Ms. Weaver) The -- what -- is there
  - 9 a subset of political segmentation that Facebook
- 12:38:31 10 provides to advertisers?
  - 11 A. We've provided specific targeted options.
  - 12 And those are when -- I think maybe segmentation
  - 13 here is interchangeable with options. So there a
  - 14 number of political targeting options that we've
- 12:38:51 15 provided to advertisers.
  - 16 Q. And what are they and how have they
  - 17 changed over time?
  - 18 A. There -- there were several faces so the
  - 19 initial face from 2014 to 2018 was five targeting
- 12:39:08 20 options that were based -- that work -- that were
  - 21 called like very label to very conservative. And
  - 22 then we multiple phases since then one face which

- 23 segmented those five into smaller or -- or more
- 24 defined groups.
- 12:39:27 25 And then the latest face that was -- we

- 12:39:32 1 introduced in 2018, which went back to five top
  - 2 level groups and those were deprecated in 20 --
  - 3 2022.
  - 4 Q. So going back to the segments from 2014
- 12:39:44 5 to 2018, what were those five targeting options?
  - 6 A. Very liberal -- liberal moderate
  - 7 conservative and very conservative.
  - 8 Q. And then you said there were -- there was
  - 9 a face from 2018 to 2020; is that fair?
- 12:40:05 10 A. Sorry, I think my -- I said 2022 but so
  - 11 2018 to 2022. And it was the same naming except it
  - 12 was likely to engage with and they were new
  - 13 segments likely to engage with very liberal content
  - 14 and then similar likely to engage with liberal
- 12:40:25 15 content likely to engage with moderate content
  - 16 likely to engage with conservative content, likely
  - 17 to engage with very conservative content and those
  - 18 were 2018 to 2022.
  - 19 Q. And why were the words likely to engage

12:40:38 20 with added to the segments?

- 21 A. It was a representation of how those
- 22 segments changed. The naming was to reflect how we
- 23 developed those.
- Q. How did the segments change?

12:40:53 25

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- Q. And you said was deprecated this year; is
- 12:41:51 15 that correct?
  - 16 A. In 2022, yes March.

- 17 Q. In March, why?
- 18 A. We announced last year that we were
- 19 deprecating a series of targeting options include
- 12:42:03 20 these that we were -- we had -- had any discussions
  - 21 over multiple years and we felt that these no
  - 22 longer met people's evolving expect tailings it was
  - 23 something that we did -- with work with advocacy
  - 24 groups with others to identify in -- and face out
- 12:42:22 25 from our targeting system.

- 12:42:24 1 Q. What expectations did it not meet?
  - 2 A. From our conversations, these -- these
  - 3 were areas that people made perceive to be
  - 4 sensitive and weren't ones that we wanted to
- 12:42:39 5 continue to support.
  - 6 Q. And when you -- you say "sensitive" what
  - 7 do you mean?
  - 8 A. I'm using the words of -- of -- of the
  - 9 groups we spoke to they found that these were areas
- 12:42:51 10 that people found sensitive and -- and -- and we
  - 11 decided those -- those targeting options would no
  - 12 longer meet people's expectations. I can't tell
  - 13 you exactly what they meant by sensitive.

- Q. But I'm just asking what Facebook means
- 12:43:09 15 by sensitive?
  - 16 A. We don't take that as a definition. It's
  - 17 that we understood people perceived these to be
  - 18 sensitive and and choose to -- not support them any
  - 19 longer.
- - 21 deprecating the use of those political targeting
  - 22 segments?
  - 23 MR. BENJAMIN: Objection to form and
  - 24 scope.
- 12:43:44 25 THE DEPONENT: Advertisers don't have

- 12:43:45 1 these segments any longer. I can't tell you if
  - 2 that means that they stopped advertising or not.
  - Q. (By Ms. Weaver) Did Facebook take any
  - 4 steps to track before or after taking the decision
- 12:43:57 5 the impact to revenue of deprecating these
  - 6 political targeting segments?
  - 7 A. Okay. What I explain.
  - 8 Q. Objection to form compound?
  - 9 THE DEPONENT: What I explained earlier
- 12:44:10 10 is relevant here too where there isn't a before and

- 11 after snapshot because revenue isn't associate with
- 12 any one targeting option.
- Q. (By Ms. Weaver) Okay. But the question
- 14 was, did Facebook take any steps to track before or
- 12:44:27 15 after making this decision the impact to revenue of
  - 16 deprecating political targeting segments?
  - 17 MR. BENJAMIN: Objection.
  - 18 THE DEPONENT: My point is --
  - MR. BENJAMIN: Objection to form.
- 12:44:39 20 THE DEPONENT: My point is that there
  - 21 isn't a one to one way to track that and so we did
  - 22 not take steps to track -- explicitly the revenue
  - 23 loss from moving these -- these segments.
  - Q. (By Ms. Weaver) Does Facebook in general
- 12:44:53 25 track revenue loss when it deprecates a product?

- 12:44:56 1 MR. BENJAMIN: Objection to form and
  - 2 scope.
  - THE DEPONENT: Can I clarify, do you mean
  - 4 understanding what our revenue was before something
- 12:45:09 5 and then after?
  - 6 Q. (By Ms. Weaver) Yes.
  - 7 A. We track our revenue. There are lots of

- 8 factors that influence revenue and we do not
- 9 associate a change in revenue specifically with the
- 12:45:24 10 removal of targeting because it is not a one to one
  - 11 relationship and.
  - 12 O. And --
  - 13 A. Yes, yeah.
  - 14 O. I understand the point but here Facebook
- 12:45:34 15 deprecated a product, correct?
  - 16 A. We deprecated targeting options and as
  - 17 clarified I call those products.
  - 18 Q. And products have budget, don't they?
  - 19 MR. BENJAMIN: Objection to form and
- 12:45:47 20 scope.
  - 21 THE DEPONENT: Budgets in the sense of
  - 22 the amounted of money Facebook uses to build those
  - 23 products?
  - Q. (By Ms. Weaver) Yes. And, again, we
- 12:45:54 25 were talking about the advertising products.

- 12:46:00 1 A. We -- we -- we do fund our product teams
  - 2 and the resources to build a product that is pretty
  - 3 separate from a revenue calculation.
  - 4 Q. Does Facebook provide or -- strike that.

- 12:46:13 5 Does Facebook track the revenue that certain products generate? 6 7 MR. BENJAMIN: Objection to scope. 8 THE DEPONENT: For ads it is not a one to one relationship because there are multiple 12:46:34 10 targeting options involved in any ad and so there isn't a way to track it directly back to a 11 12 targeting option to track revenue definitely back 13 to a targeting option. 14 0. (By Ms. Weaver) Are you saying that this product was a targeting option in your answer? 12:46:48 15 16 MR. BENJAMIN: Objection to form. THE DEPONENT: It would be political --17 18 0. (By Ms. Weaver) The reason I'm asking you are keeping answering in generalities and I'm 19 12:47:02 20 talking these politically targeting segments that
  - 23 MR. BENJAMIN: Objection to scope.

you just discussed, did Facebook's revenue decrease

24 THE DEPONENT: These targeting

when it deprecated them?

21

22

12:47:19 25 products -- these specific political segments were

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12:47:24 1 deprecated there is not one to way to measure if

- 2 any increase or decrease in revenue is related to
- 3 that deprecation.
- 4 Q. (By Ms. Weaver) I'm not asking about a
- 12:47:30 5 one to one ratio. I'm just asking, after Facebook
  - 6 deprecated these products, did its targeting
  - 7 revenue decrease?
  - 8 MR. BENJAMIN: Objection to form. Asked
  - 9 and answered. Vague. And outside the scope.
- 12:47:45 10 THE DEPONENT: I think the issue is the
  - 11 question assumes causality. If revenue changed in
  - 12 the last six months, there could be many reasons
  - 13 for that.
  - 14 Q. (By Ms. Weaver) Okay. But as you sit
- 12:47:58 15 here I will worry with my experts about causation
  - 16 I'm simply trying to get the facts.
  - 17 As you sit here, do you know if
  - 18 Facebook's revenue decreased after it deprecated
  - 19 political targeted advertising segments?
- 12:48:12 20 MR. BENJAMIN: Objection to form. Asked
  - 21 and answered. Vague. Argumentative. And outside
  - 22 the scope.
  - 23 THE DEPONENT: I do not know our revenue
  - 24 decreased because of a removal of these targeting
- 12:48:25 25 options that is not something that we can measure.

- 12:48:27 1 Q. (By Ms. Weaver) That's not what I'm
  - 2 asking.
  - 3 Facebook deprecated political targeting
  - 4 segments in March 2020, correct?
- 12:48:35 5 A. 2022.
  - 6 Q. Sorry. 2022.
  - 7 Did Facebook's revenue for targeting
  - 8 advertising decrease in API 2022?
  - 9 MR. BENJAMIN: Objection to form. Asked
- 12:48:48 10 and answered repeatedly. Argumentative. Outside
  - 11 the scope.
  - 12 THE DEPONENT: I don't know how else to
  - 13 answer the question then to help disassociate these
  - 14 because if our -- our -- I would like our
- 12:49:06 15 quarterly statements represents what revenue is
  - 16 doing and those are not directly related and -- one
  - 17 to one fashion with any one product deprecation.
  - 18 Q. (By Ms. Weaver) I was just asking if
  - 19 revenue decreased. Do you know the answer?
- 12:49:22 20 MR. BENJAMIN: Same objections as the
  - 21 prior two questions.
  - MS. WEAVER: It's not I don't have an
  - 23 answer I'm entitled either you donor you don't know

- 24 this is the question.
- 12:49:31 25 Between March of 2022 and April of 2022,

- 12:49:36 1 did Facebook's targeted advertising revenue
  - 2 decrease.
  - 3 MR. BENJAMIN: Objection to form. Asked
  - 4 and answered. Argumentative. Vague. Outside the
- 12:49:49 5 scope.
  - 6 THE DEPONENT: I would have to reference
  - 7 our quarterly earnings statements to answer that
  - 8 and I don't know it more granularity.
  - 9 Q. (By Ms. Weaver) Do you receive reports
- 12:50:00 10 of Facebook's targeted advertising revenue on a
  - 11 weekly or monthly basis?
  - MR. BENJAMIN: Objection to form.
  - 13 Compound.
  - 14 THE DEPONENT: I personally do not
- 12:50:18 15 receive a continuous update of our revenue. No.
  - 16 Q. (By Ms. Weaver) Do you know if one
  - 17 exists at Facebook I wasn't asking you personally I
  - 18 was asking Facebook the deponent. So does Facebook
  - 19 prepare and circulate weekly or monthly snapshots
- 12:50:36 20 of targeted advertising revenue?

- 21 MR. BENJAMIN: Objection to form and
- 22 scope.
- 23 THE DEPONENT: Can I ask a clarifying
- 24 question, are you specifically -- when you say
- 12:50:50 25 targeted advertising revenue "did you just mean our

- 12:50:53 1 ads business"?
  - Q. (By Ms. Weaver) What is targeting?
  - 3 A. Those are one in the stamp in my mind I
  - 4 want to.
- 12:50:57 5 Q. Okay?
  - 6 A. Make sure that's also the case when you
  - 7 are saying.
  - 8 Q. Yes. Fine ads business but broken out by
  - 9 with some granularity as opposed to the public
- 12:51:08 10 facing documents. So let me ask it again.
  - 11 Does Facebook prepare and circular weekly
  - 12 or monthly snapshots of targeted advertising
  - 13 revenue?
  - 14 MR. BENJAMIN: Objection to form.
- 12:51:31 15 THE DEPONENT: We tracked revenue from
  - 16 our ads business, the -- it is not broken out by
  - 17 targeting by targeting option that is not a

- 18 granularity that we break out because it is not a
- 19 measurement of revenue.
- 12:51:45 20 Q. (By Ms. Weaver) Does it break it out by
  - 21 core audience, behavior and custom audience?
  - MR. BENJAMIN: Objection to form.
  - THE DEPONENT: No.
  - Q. (By Ms. Weaver) How does it break it
- 12:51:59 25 out?

- 12:52:01 1 A. It breaks out by region in the sense of
  - 2 where we are making this money. And where
  - 3 advertisers spending on our platform. And it
  - 4 breaks it out by usually by size of advertisers so
- 12:52:15 5 is this an advertiser we can consider a small
  - 6 medium business or a large advertiser.
  - 7 Q. And how often are these reports
  - 8 circulated?
  - 9 MR. BENJAMIN: Objection to form and
- 12:52:29 10 scope.
  - 11 THE DEPONENT: Our ads leadership teams
  - 12 might get these once a week.
  - Q. (By Ms. Weaver) What are they called?
  - 14 A. I honestly don't know what the name of

- 12:52:46 15 the report or -- might be, I don't know.
  - Q. Do you know who would know?
  - 17 MR. BENJAMIN: Objection to scope.
  - 18 THE DEPONENT: Part of our analytics team
  - 19 would know. But I don't know a specific name. As
- 12:53:06 20 I said these -- well, yeah.
  - Q. (By Ms. Weaver) Who were did main
  - 22 advertisers who were paying for political targeting
  - 23 segments between the time period 2014 to 2022?
  - 24 A. To clarify.
- 12:53:25 25 MR. BENJAMIN: Objection to form.

- 12:53:28 1 THE DEPONENT: To clarify when you saying
  - 2 "paying for political targeting segment you mean
  - 3 choosing to one with ad part of desired audience"?
  - 4 Q. (By Ms. Weaver) Yes.
- 12:53:37 5 A. Okay. I don't know the -- the advertiser
  - 6 entity breakdown for those over -- over seven
  - 7 years. But that's not something I know off the top
  - 8 of my head.
  - 9 Q. I didn't ask for the advertising entity
- 12:53:55 10 breakdown but can you name any companies who paid
  - 11 for political targeted advertising from the time

- 12 period 2014 to 2022?
- MR. BENJAMIN: Objection to form.
- 14 Argumentative. And scope.
- 12:54:17 15 THE DEPONENT: This -- I would be
  - 16 speculating without looking at that specifically
  - 17 that would be something that we would look up more
  - 18 so than know generally.
  - 19 Q. (By Ms. Weaver) So the name
- 12:54:27 20 Cambridge Analytica doesn't come to mind?
  - 21 MR. BENJAMIN: Objection to form.
  - 22 Argumentative.
  - THE DEPONENT: It didn't come to mind,
  - 24 no.
- 12:54:36 25 Q. (By Ms. Weaver) Was Cambridge Analytica

- 12:54:37 1 one of the companies that paid Facebook for
  - 2 targeted political targeting during the time period
  - 3 from 2014 to 2022?
  - 4 A. And, again, specifically meaning did
- 12:54:49 5 Cambridge Analytica create an ad using those
  - 6 targeting options?
  - 7 Q. Yeah.
  - 8 A. I -- I don't know.

- 9 Q. Do you know whether or not
- 12:55:03 10 Cambridge Analytica paid Facebook \$100 million for
  - 11 advertising of a political nature in 2016?
  - 12 A. I do know.
  - MR. BENJAMIN: Objection to form.
  - 14 THE DEPONENT: That Cambridge Analytica
- 12:55:17 15 advertised on our platform.
  - 16 Q. (By Ms. Weaver) But you don't know the
  - 17 amount and what for?
  - 18 A. I don't know.
  - 19 MR. BENJAMIN: Objection -- objection to
- 12:55:27 20 form and scope.
  - 21 THE DEPONENT: I do not know the exact
  - 22 amount or the exact targeting options that they
  - 23 choose for their desired audience.
  - Q. (By Ms. Weaver) What do you know about
- 12:55:38 25 that topic?

- 12:55:42 1 MR. BENJAMIN: Objection to form.
  - 2 Argumentative and scope.
  - 3 THE DEPONENT: About ad targeting I'm
  - 4 happy to chat through more on the segments and how
- 12:55:54 5 anything about those. I don't -- I'm not sure if

- 6 that's what you meant or if you mean specifically
- 7 Cambridge.
- 8 Q. (By Ms. Weaver) I mean
- 9 Cambridge Analytica which is the trigger for this
- 12:56:05 10 lawsuit and what Cambridge Analytica paid Facebook
  - 11 for targeted political advertising?
  - 12 A. I do not know details about the -- the
  - 13 Cambridge Analytica spend specifically.
  - 14 Q. Do you know anything else about what why
- 12:56:28 15 Cambridge Analytica was paying for Facebook for
  - 16 advertising in 2016?
  - 17 MR. BENJAMIN: Objection to both form and
  - 18 scope.
  - 19 THE DEPONENT: I think you are indicating
- 12:56:43 20 if there were other reasons they -- they paid us.
  - 21 I do not know of those.
  - Q. (By Ms. Weaver) Did Facebook makes
  - 23 changes to the political targeting segments in 2018
  - 24 as a result of the Cambridge Analytica scandal?
- 12:57:13 25 A. No.

- 12:57:13 1 Q. And how do you know that?
  - 2 MR. BENJAMIN: Objection to form.

- 3 THE DEPONENT: I was part of the team but
- 4 also from speaking to some of the -- throughout my
- 12:57:31 5 prep in understanding how we evolved these segments
  - 6 and it was not linked to Cambridge Analytica.
  - 7 Q. (By Ms. Weaver) When you say you were
  - 8 part of the team, which team do you mean?
  - 9 A. I worked on ads as part of the policy
- 12:57:46 10 team and at Meta working on ads.
  - 11 Q. And so what was the reason for making the
  - 12 changes to targeted advertising in 2018?
  - 13 A. Specifically the segments we evolved the
  - 14 way we were creating them.
- - 18 Q. Right. You described that earlier.
  - 19 The question I asked you was why. What
- 12:58:30 20 is the reason?
  - 21 A. Those were updated models that -- that
  - 22 would function better to show people relevant ads.
  - Q. How would they function better and how
  - 24 did you determine that?
- 12:58:48 25 MR. BENJAMIN: Objection to form.

- 12:58:52 1 THE DEPONENT: When those were options
  - 2 are added in we found -- those -- those options
  - 3 were performed better to show people relevant ads.
  - 4 Q. (By Ms. Weaver) How do you know they
- 12:59:03 5 performed better?
  - 6 A. We saw advertisers using them and we saw
  - 7 people engaging with those ads.
  - 8 Q. Were there reports generated that
  - 9 reflected data to you that indicated that these ads
- 12:59:19 10 were performing better prior to making the change?
  - 11 A. Meaning specifically was there alive test
  - 12 for this?
  - 13 Q. I'm trying to understand the information
  - 14 that you use when decided to make this change.
- 12:59:35 15 Just telling me you -- that you made the change
  - 16 doesn't explain why so?
  - 17 A. Yeah.
  - 18 Q. I'm trying to understand the information
  - 19 that you used to make this change, were there
- 12:59:45 20 studies were there analyses?
  - 21 MR. BENJAMIN: Objection to form.
  - 22 Q. (By Ms. Weaver) I ask the question
  - 23 again.
  - 24 Were there reports generated that

12:59:54 25 reflected data that indicated these ads were

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- 12:59:56 1 performing better prior to making the change?
  - 2 A. Not in the form of a before and after
  - 3 snapshot. Our teams build new targeting options
  - 4 because they want to evolve the platform and evolve
- 01:00:20 5 the tools we offer. This is an example of that
  - 6 where the 2014 to 2018 method of creating those
  - 7 segments wasn't what our -- what the team felt was
  - 8 like the best way to do it. And so they created
  - 9 the next version which was an updated way that used
- 01:00:42 10 content engagement and performed well for those ads
  - 11 he in that when we launched those advertiser used
  - 12 them and people saw and engaged with the ads.
  - 13 Q. Did Facebook make any changes to how it
  - 14 conducted political targeted advertising as a
- 01:01:02 15 result of Cambridge Analytica scandal?
  - MR. BENJAMIN: Objection to form.
  - 17 THE DEPONENT: No.
  - 18 Q. (By Ms. Weaver) Okay.
  - 19 Q. So Facebook provides metrics to
- 01:01:36 20 advertisers about their advertisers, correct?
  - 21 A. Yes.

- Q. What metrics does Facebook provide?
- 23 A. We provide performance metrics to
- 24 advertisers.
- 01:01:50 25 Q. Do you do those through the ad manager

- 01:01:55 1 tool?
  - 2 A. That is an example place where most
  - 3 advertisers reference and get those yes.
  - 4 Q. What the -- is the ad manager tool?
- 01:02:04 5 A. Ads manager is the -- I that advertisers
  - 6 can both place their ads to create the ad upload
  - 7 the content for it and then also come back to -- to
  - 8 understand how the ad is performing.
  - 9 O. And what is ads -- does -- does Facebook
- 01:02:23 10 also provide metrics through ads APIs?
  - 11 A. Yes.
  - 12 O. And what are those and what information
  - 13 does it provides through them?
  - 14 A. An API --
- 01:02:35 15 MR. BENJAMIN: Objection to form.
  - 16 THE DEPONENT: An API is a -- is a way to
  - 17 programmatically call information instead of using
  - 18 our -- our built interface. The API includes the

- 19 same information, so for an ad it would include the
- 01:02:55 20 impressions and clicks and the performance metrics
  - 21 that -- for any given ad.
  - Q. (By Ms. Weaver) And does Facebook also
  - 23 perform an analysis of the quality of the ad?
  - 24 MR. BENJAMIN: Objection to form.
- 01:03:17 25 THE DEPONENT: I want to be sure this is

- 01:03:19 1 in context that you are thinking of.
  - Q. (By Ms. Weaver) Okay.
  - A. As part of ad delivery, our -- as part of
  - 4 our total value equation that I was talking about
- 01:03:27 5 earlier we do include ad quality. And that is our
  - 6 prediction of -- of the type of ad and whether it
  - 7 is sensational or -- or click baity or the quality
  - B of the images of the ad.
  - 9 Q. When you say sensational, what do you
- 01:03:48 10 mean?
  - 11 A. Collar to click bait it's when like the
  - 12 text is -- is ten great tips for is an example. Of
  - 13 sensational click bait text.
  - Q. So but for the record what do you mean by
- 01:04:07 15 click bait?

- 16 A. Click bait is and I will -- will -- is
- 17 like an industry concept around ads, which is
- 18 usually that the ad does not provide the actual
- 19 message. It is meant to entice someone to click so
- 01:04:25 20 it's a catching key headline in order to get to the
  - 21 content somewhere else.
  - Q. And do advertisers pay for more for click
  - 23 bait?
  - 24 MR. BENJAMIN: Objection to form and
- 01:04:42 25 scope.

- 01:04:42 1 THE DEPONENT: So the importance of ad
  - 2 quality in our -- in our delivery system is to help
  - 3 us ensure that we are taking into consideration
  - 4 different parts of the ad in order to determine who
- 01:04:55 5 should see it.
  - 6 So the advertisers bid is part of it.
  - 7 The estimated rate which represents people's
  - 8 interest and the ad quality of the ad of lower
  - 9 quality less likely to be delivered and ad of
- 01:05:08 10 higher quality that doesn't have click baity
  - 11 content in is more likely to be delivered.
  - 12 Q. (By Ms. Weaver) So how does Facebook

- 13 analyze ad quality?
- 14 A. By analyze we look -- as part of our ad
- 01:05:26 15 delivery it's the machine-learning models also look
  - 16 at -- the text of the ad, the images and whether
  - 17 it's been -- whether people have hidden it and kind
  - 18 of user feedback on I as well to establish if it --
  - 19 a predictions of attorney-client communications
- 01:05:44 20 quality.
  - Q. And what are the factors that tend to
  - 22 cause people to take action about an ad which --
  - 23 which increases its ad quality?
  - A. Sorry can you clarify people take action
- 01:06:01 25 on ad that increases its ad quality.

- 01:06:03 1 Q. Okay. Well, you described that one of
  - 2 the components is for example, whether people have
  - 3 hidden an ad. As well as user feedback, right?
  - 4 A. Yes.
- 01:06:12 5 Q. Would you describe people high hiding an
  - 6 ad as taking action?
  - 7 A. I would. It doesn't IP accuracy ad
  - 8 quality.
  - 9 Q. Okay. Are there actions that people take

- 01:06:22 10 that do increase ad quality?
  - 11 A. No we use it as a way to understand if
  - 12 people are seeing something problematic, so it
  - 13 is -- it is an indication of someone not wanting to
  - 14 seek content that what's feeds into ad quality.
- 01:06:41 15 Q. And how do you infer that time do want to
  - 16 see content?
  - 17 A. By choosing to hide the ad Wyoming is
  - 18 choice on the ad for people.
  - 19 Q. So Facebook take steps to try to identify
- 01:06:56 20 what ads users do not want to see?
  - 21 MR. BENJAMIN: Objection to form.
  - 22 THE DEPONENT: Can you clarify if you
  - 23 mean generally as part of ad quality.
  - Q. (By Ms. Weaver) Yes.
- 01:07:11 25 A. On a more individual level.

- 01:07:14 1 Q. Generally as part of ad quality?
  - 2 A. That's precisely why we include ad
  - 3 quality in our ad delivery so is that a part of a
  - 4 feedback loop from someone potentially not wanting
- 01:07:25 5 to see something that feeds into our -- our ad
  - 6 delivery because the goal of that delivery is to

- 7 show people ads they want to see.
- 8 O. And what is the purpose of an ad quality
- 9 score in providing it to advertisers?
- 01:07:40 10 A. It provides advertisers with transparency
  - 11 into how the part of their ad performance.
  - 12 Q. Is it true, that advertisers will pay
  - 13 more for ads with a higher ad quality score?
  - 14 MR. BENJAMIN: Objection to scope.
- 01:08:04 15 THE DEPONENT: Can you clarify what you
  - 16 mean pay for more.
  - 17 O. (By Ms. Weaver) Yes.
  - 18 How was Facebook compensated for
  - 19 advertising?
- 01:08:14 20 A. Advertisers create the ad and they pay
  - 21 for the -- the delivery of that ad for -- for
  - 22 the -- the -- the every time the ad is shown.
  - Q. And if advertisers don't buy ads on
  - 24 Facebook, Facebook doesn't earn money from them,
- 01:08:34 25 right?

- 01:08:37 1 A. We would not have ad spend from them,
  - 2 correct.
  - 3 Q. And is ad spend effected by increasing ad

- 4 quality scores at Facebook?
- 01:08:52 5 A. So.
  - 6 MR. BENJAMIN: Objection to form.
  - 7 THE DEPONENT: To be clear -- to clarify,
  - 8 ad spend is based on how often or the fact that we
  - 9 have shown the ad, so it is separate from ad score.
- 01:09:06 10 Ad score is part of the delivery to determine who
  - 11 sees the ad. It's not that they are paying for ad
  - 12 score.
  - 13 Q. (By Ms. Weaver) Right. I understand
  - 14 that.
- 01:09:17 15 A. Okay.
  - 16 Q. This is not very complicated I'm just
  - 17 trying to get basic established. Right. Facebook
  - 18 creates ad scores so as a marketing tool to
  - 19 encourage people to add material vise on Facebook
- 01:09:28 20 because you are saying look high quality ads you
  - 21 are getting responses is that fair?
  - MR. BENJAMIN: Objection to form.
  - 23 THE DEPONENT: No. It's our assessment
  - 24 of the quality of their ads so that they understand
- 01:09:39 25 if they had low performance if it's due to a low

- 01:09:42 1 quality ad. Or if they need to increase their
  - 2 performance or increase the quality of their ads in
  - 3 order to see better performance because people like
  - 4 better ads than bad ads.
- 01:09:55 5 Q. (By Ms. Weaver) Right ads are per
  - 6 recalling better advertisers buy more of them less
  - 7 of them because they are not performing better,
  - 8 right?
  - 9 MR. BENJAMIN: Objection to form. And
- 01:10:07 10 scope.
  - 11 THE DEPONENT: I think the courts.
  - 12 Q. (By Ms. Weaver) Do advertisers like to
  - 13 pay low performing ads or high performing ads?
  - 14 A. Advertisers wouldn't be paying if the ad
- 01:10:22 15 isn't performing they their spend is based on the
  - 16 ad actually being shown and the action being taken.
  - 17 O. So cocaines the performance of the ad
  - 18 increases the advertisers ad spend, correct?
  - MR. BENJAMIN: Objection to form.
- 01:10:39 20 THE DEPONENT: I think we are using the
  - 21 word the words differently here. It's -- it's
  - 22 that -- their spend proportional to people taking
  - 23 the action on their ad. People taking that action
  - 24 is because they want to -- so ad relevant they
- 01:10:59 25 click and advertiser pays for that.

- 01:11:02 1 If an ad score is low, the people are
  - 2 less leakily to take that action and it is a way
  - 3 for advertisers to understand how to create a
  - 4 better ad if they want to. There is no requirement
- 01:11:17 5 to but if they want to create a better ad and then
  - 6 see better performance because that ad is a better
  - 7 ad, they will then pay for the better performance.
  - 8 Q. (By Ms. Weaver) Exactly.
  - 9 And so it's in Facebook's financial
- 01:11:32 10 interest to -- kinds of ads people do not want to
  - 11 see because they will not take action and the
  - 12 advertiser will not pay Facebook because it's not a
  - 13 higher performing ad, right?
  - 14 MR. BENJAMIN: Objection to form.
- 01:11:51 15 THE DEPONENT: I think what you've
  - 16 identified is the fact that we should want to show
  - 17 good ads because it's better for both people who
  - 18 want to see better ads and don't want terrible ads
  - 19 in newsfeed and for advertisers because now they
- 01:12:04 20 are connected in with a user. That is very
  - 21 different than a marketing play that I think is
  - 22 being described here. It is simply that we ban

- 23 better ads on the platform and this is an example
- 24 of that.
- 01:12:17 25 Q. (By Ms. Weaver) Why does Facebook want

- 01:12:19 1 better ads on the platform?
  - 2 A. To provide a free service to people.
  - Q. It's not because Facebook wants to make
  - 4 more money you remember you are under oath?
- 01:12:29 5 A. We make money to provide a free service
  - 6 to people.
  - 7 Q. Okay.
  - 8 MR. BENJAMIN: An objection to the last
  - 9 question.
- 01:12:35 10 Q. (By Ms. Weaver) Does Facebook make more
  - 11 money when people take more actions on ads?
  - MR. BENJAMIN: Objection to form.
  - 13 THE DEPONENT: Yes.
  - 14 Q. (By Ms. Weaver) Thank you.
- 01:12:57 15 Preparing for your deposition, did you
  - 16 review any reports that Facebook provides to tiff
  - 17 advertisers that reflects the metrics of their
  - 18 campaigns?
  - 19 A. I -- I didn't review any specific

- 01:13:20 20 reports.
  - Q. Do you review them on a daily basis?
  - 22 A. Through the course of my job, no.
  - Q. Are they -- did you at one point when
  - 24 were you in ads integrity?
- 01:13:35 25 MR. BENJAMIN: Objection.

- 01:13:35 1 THE DEPONENT: Review --
  - 2 MR. BENJAMIN: Objection to scope.
  - 3 THE DEPONENT: Review reports about
  - 4 advertisers?
- 01:13:42 5 Q. (By Ms. Weaver) Let me rephrase the
  - 6 question.
  - 7 Facebook?
  - 8 A. Yes.
  - 9 Q. Provides analytics to advertisers through
- 01:13:49 10 at least two kinds of tools, right?
  - 11 A. Yes.
  - 12 Q. What are those reports look like?
  - MR. BENJAMIN: Objection --
  - 14 THE DEPONENT: In --
- 01:13:57 15 MR. BENJAMIN: -- to form.
  - 16 THE DEPONENT: In ads manager it will

- 17 show for that ad as an example the aggregate count
- 18 of impressions or clicks it received and the
- 19 amounts spend. The same information would be
- 01:14:10 20 provided in the API for someone to call if they
  - 21 wanted outside of the UI.
  - 22 Q. (By Ms. Weaver) And did you in preparing
  - 23 for this deposition today review any such reports?
  - A. I did not go and specifically look up an
- 01:14:29 25 ads's report, no.

- 01:14:32 1 Q. Can you identify the -- all of the exact
  - 2 metrics that are provided to advertisers.
  - 3 MR. BENJAMIN: Objection to form and
  - 4 scope?
- 01:14:47 5 A. Off the top of my head I can explain the
  - 6 buckets of performance metric that we provided.
  - 7 O. Okay. What are the buckets?
  - 8 A. As I said there -- those center around
  - 9 the -- the performance of the ad. So how much
- 01:15:02 10 impressions has it shown. How many clicks has it
  - 11 generated. How many people have taken the action
  - 12 that the advertiser that -- that objective. Ad
  - 13 score is also included and the amount spend. So

- 14 that an advertisers understand how their ad is
- 01:15:19 15 delivering on Facebook.
  - 16 Q. And just to address again an out of scope
  - 17 objection at the bottom of page two of Exhibit 657
  - 18 it says, Ms. Leone will be prepared to discuss the
  - 19 metrics Facebook provides advertisers about their
- 01:15:37 20 advertisements which Facebook provides through its
  - 21 ad manager tool and ads APIs.
  - 22 So you describe the buckets but you can't
  - 23 identify all of the specific metrics; is that
  - 24 right?
- 01:15:51 25 A. I don't have memorized line item every

- 01:15:55 1 single metric. But yes the purpose and the fact
  - 2 that we provide how the ad is delivering the
  - 3 actions people have taken and the ad score and ad
  - 4 spend.
- 01:16:07 5 Q. And has that changed over time from 2007
  - 6 to the present?
  - 7 A. Our UIs have changed over time and so the
  - 8 format of those has changed, yes.
  - 9 Q. And what has changed?
- 01:16:24 10 A. The way we display those has changed. As

- 11 we ad in a new objectives also the type of metric
- 12 that relates to it would have been added in as
- 13 well.
- Q. When you say type of metric that relates
- 01:16:38 15 to it what do you mean?
  - 16 A. For example, a click or if you run a a
  - 17 page like ad we will show you how many people
  - 18 actually liked the page from that ad which is
  - 19 different from if you run a website click ad how
- 01:16:56 20 many people click because the action they took is
  - 21 different so the metric would -- would be
  - 22 related to the action taken.
  - Q. How does Facebook beside what to charge
  - 24 for the ads that it serves for advertisers?
- 01:17:21 25 A. Our -- there two parts to this primarily.

- 01:17:25 1 There's the advertiser sets a bid so they decide
  - 2 how much they want to pay to show the ad to their
  - 3 desired audience in then in our ad auction we take
  - 4 that into account. We know for a given user, all
- 01:17:41 5 of the ads they are eligible to see and the bids
  - 6 for those ads, and out of the total value equation
  - 7 we determine which ads should within the auction.

- 8 At that point they are charged the second highest
- 9 bid.
- 01:17:59 10 Q. And when you say you take into account an
  - 11 ads a given user can see, does Facebook perform a
  - 12 calculation of the revenue that has been associated
  - 13 with given users?
  - 14 A. Can you -- can you clarify what you mean
- 01:18:16 15 there?
  - 16 Q. Does Facebook perform a calculation of
  - 17 revenue that has been associated with ads served to
  - 18 a given user?
  - 19 A. I understand you to mean whether we
- 01:18:30 20 calculate the total amount of -- that we were paid
  - 21 for an impression to show a specific user.
  - 22 Q. Yes.
  - 23 A. No.
  - Q. Facebook does and can identify all of the
- 01:18:44 25 ads that were shown to a specific user, right?

- 01:18:48 1 A. Yes.
  - 2 O. And Facebook can also calculate how much
  - 3 it was paid for a given -- ad campaign in which
  - 4 those ads were shown, right?

- 01:18:58 5 A. The total spend, yes.
  - 6 Q. And so you would calculate the total
  - 7 spend by the number of users who received that ad
  - 8 if you wanted to calculate the average revenue per
  - 9 user, right?
- 01:19:12 10 MR. BENJAMIN: Objection to form.
  - 11 THE DEPONENT: So calculating the total
  - 12 spend of an ad would not get me to the individual
  - 13 revenue from showing an another to one user.
  - 14 Q. (By Mr. Benjamin) If divided the number
- 01:19:26 15 of the users by the total spend why wouldn't that
  - 16 give you an average revenue per user?
  - 17 A. For that one ad?
  - 18 Q. Or campaign or for an ad, sure?
  - 19 A. Sorry to clarify if you have the total
- 01:19:39 20 spend from a specific ad, and you know the 200
  - 21 people who saw that ad, yes you would divide the
  - 22 total spend by the 200 impressions and then say
  - 23 there's a cost per impression.
  - Q. And does Facebook calculate whether
- 01:19:58 25 certain Facebook users generate more revenue for

- 2 A. No.
- 3 Q. Based on their responses to advertising?
- 4 A. No.
- 01:20:11 5 O. So in fact all Facebook users are viewed
  - 6 equal lie by Facebook with regard to the amount of
  - 7 revenue that they generated for Facebook; is that
  - 8 fair?
  - 9 MR. BENJAMIN: Objection to form.
- 01:20:24 10 Misstates.
  - 11 THE DEPONENT: We just -- we don't have
  - 12 an assessment of user by user revenue associated
  - 13 with them.
  - 14 Q. Great.
- 01:20:39 15 Did Facebook at some -- some time engage
  - 16 an effort to restrictive versions use of
  - 17 advertising related data?
  - 18 MR. BENJAMIN: Objection to form.
  - 19 THE DEPONENT: For advertising related
- 01:21:09 20 data do you mind clarifying kind of -- kind of what
  - 21 you are thinking of there.
  - 22 Q. Sure.
  - 23 A. Just so I am.
  - Q. Sure. I'm reading counsel letter ad
- 01:21:18 25 targeting page three and it says "Ms. Leone will be

- 01:21:21 1 prepared to discuss Facebook's policies restricting
  - 2 advertiser use of advertising related data i.e.
  - 3 limiting it to its use case"?
  - 4 A. Yes.
- 01:21:38 5 Q. What is?
  - 6 A. So --
  - 7 Q. Let me ask the question?
  - 8 A. Yeah, yeah, please.
  - 9 Q. What is advertising related data mean in
- 01:21:46 10 that sentence?
  - 11 A. I'm not 100 percent sure exactly what it
  - 12 means here. But this is meant to indicate that we
  - 13 have terms and policies around the use of data
  - 14 that's related to ads and this references that, so
- 01:22:07 15 as an example, we have custom audience terms and we
  - 16 have business tool terms so what are the custom
  - 17 audience terms.
  - 18 A. When someone uploads a customer list,
  - 19 they agree to those terms and those are the
- 01:22:32 20 policies that -- in order to use that product.
  - Q. What is a customer list?
  - 22 A. A customer list is one of types of the
  - 23 custom audiences it's a targeting opposite that an

- 24 advertiser can use.
- 01:22:49 25 Q. Okay. Let's talk about custom audience

- 01:22:52 1 for a minute and take a pause. What are custom
  - 2 audiences?
  - 3 A. Custom audiences was one of that -- that
  - 4 kind of like third bucket of targeting tool types.
- 01:23:04 5 Within it customer list is one where an advertiser
  - 6 uploads a -- a list of their existing customers.
  - 7 Q. And does Facebook then possess the
  - 8 customer list?
  - 9 A. No. We hash the list when an advertiser
- 01:23:25 10 uploads it the identifiers in that list and then we
  - 11 compare it to our hash data to understand a match
  - 12 and then we delete the advertiser list. And we do
  - 13 not send them back the information about the users
  - 14 who matched.
- 01:23:46 15 Q. What analytics does Facebook provide
  - 16 advertisers who advertiser through custom
  - 17 audiences?
  - 18 A. When argumentative verify creates a
  - 19 custom audience or the customer list specifically
- 01:23:58 20 here, they would understand within ranks the size

- 21 of it, and when they then use it for their audience
- 22 they would get the same reporting metrics that we
- 23 per performance metrics that we provide for any ad.
- O. And over time has the size of accustom
- 01:24:21 25 audience that an advertiser collects change?

- 01:24:26 1 MR. BENJAMIN: Objection to form.
  - 2 THE DEPONENT: Can you clarify what you
  - 3 mean by advertiser collect here?
  - 4 Q. Sorry over the time of a custom audience
- 01:24:43 5 Aaron reports get by an advertiser changed?
  - 6 MR. BENJAMIN: Objection to form.
  - 7 THE DEPONENT: The customer list is
  - 8 provided by the advertiser, that is something
  - 9 that -- that they decide. The size of and -- and
- 01:24:56 10 bring in -- and uploading, so really this -- it's
  - 11 independent of us they -- they make that choice
  - 12 based on their existing customers and their desired
  - 13 audience.
  - Q. (By Ms. Weaver) Does Facebook also
- 01:25:10 15 create custom audiences not from customer lists but
  - 16 through other characteristics?
  - 17 A. There were the two other types of custom

- 18 audiences one is based on our business tools, so
- 19 website custom audiences or an app custom audience
- 01:25:30 20 and then the other category was based on engagement
  - 21 custom audiences, which is engagement with people
  - 22 who have interacted with your page on Facebook.
  - Q. So what are website or app custom
  - 24 audiences?
- 01:25:48 25 A. Website and app custom audiences are re

- 01:25:51 1 engagement through our business tools, so when --
  - 2 when a website owner or an app has our business
  - 3 tools, as an example, a website could say, I will
  - 4 put the pixel on the check out. They would then be
- 01:26:11 5 able to use the targeting tool to or the targeting
  - 6 option of website custom audiences to re engage
  - 7 with people who have taken that action on their
  - 8 website.
  - 9 THE DEPONENT: Apology is my video
- 01:26:23 10 jumping to anybody else; it's a little bit.
  - 11 Okay.
  - MS. WEAVER: We can go off the record if
  - 13 you are having an issue.
  - 14 THE DEPONENT: No, we are good.

- 01:26:30 15 Q. (By Ms. Weaver) Okay. And the second is
  - 16 engagement audiences is that correct?
  - 17 A. Engagement custom audiences, yes.
  - 18 O. And what are those?
  - 19 A. Those are based on on-site engagement, so
- 01:26:56 20 a Facebook page, did followers of that Facebook
  - 21 page the advertiser for that page would be able to
  - 22 re engage, with -- with that group of users by
  - 23 saying I want to reach back to people who have
  - 24 engaged with -- or followed my page.
- 01:27:16 25 Q. And with regard any of these three

- 01:27:19 1 thinned audidence Facebook restricted op the size
  - 2 of the audiences that advertiser may target from
  - 3 2007 to the present?
  - 4 A. Yes.
- 01:27:27 5 Q. Why?
  - 6 A. We've -- we have a minimum of the
  - 7 audience side will deliver to help ensure that
  - 8 advertisers aren't distilled information from --
  - 9 from that delivery.
- 01:27:44 10 Q. And how is it changed specifically over
  - 11 time.

- MR. BENJAMIN: Objection to form.
- 13 THE DEPONENT: Those thresholds have --
- 14 have changed -- they have increased, so for
- 01:28:00 15 example, it increased I know like for customer list
  - 16 it is 100 we have to 100 match in order to use that
  - 17 audience.
  - 18 Q. (By Ms. Weaver) This is as of 2022?
  - 19 A. It is currently, yes and over time
- 01:28:23 20 that -- that was increased. There was always a
  - 21 minimum and I believe -- I don't know exactly what
  - 22 that was. But it -- we've seen -- we have
  - 23 revisited those thresholds and we increased them I
  - 24 believe in 2018.
- 01:28:43 25 Q. Do you know generally what range they

- 01:28:46 1 were in prior to 2018?
  - 2 MR. BENJAMIN: Objection to form.
  - 3 THE DEPONENT: I don't. I don't recall
  - 4 specifically what they were.
- 01:29:06 5 Q. (By Ms. Weaver) Was it less than 20?
  - 6 A. No, no.
  - 7 Q. Was there any point in time in which from
  - 8 2007 to the present, at which advertiser could

- 9 target custom audiences of 20 people or fewer?
- 01:29:26 10 MR. BENJAMIN: Objection to form.
  - 11 THE DEPONENT: No fewer than 20 people is
  - 12 not allowed, has not been allowed in a custom
  - 13 audience and we don't enable an advertiser to
  - 14 target singular users that's -- that's partly why
- 01:29:39 15 we have this protection in place.
  - 16 Q. (By Ms. Weaver) And why is that why
  - 17 don't Facebook allow advertiser to target singular
  - 18 users?
  - 19 A. That's not the way we have built our
- 01:29:52 20 targeting system one of our core areas is that we
  - 21 don't tell an advertiser who you are provide
  - 22 information to them for that purpose.
  - 23 And a -- a protection to do is to ensure
  - 24 that there is an audience minimum.
- 01:30:07 25 Q. And I'm -- I understand what you are

- 01:30:09 1 saying what. But I'm asking again, why does
  - 2 Facebook allow individual users to be targeted?
  - 3 A. Because we -- we don't want an advertiser
  - 4 to have information about an individual user, that
- 01:30:23 5 is way we have set up our system.

- 6 Q. And why doesn't Facebook want an
- 7 advertiser to have information about an individual
- 8 user?
- 9 MR. BENJAMIN: Objection to form. Asked
- 01:30:33 10 and answered.
  - 11 THE DEPONENT: We -- we specifically tell
  - 12 users that we don't tell an advertiser about them.
  - 13 And we have consistently maintained that and that's
  - 14 also why we build our products to ensure that --
- 01:30:49 15 with the protection so that that's not the outcome.
  - 16 Q. (By Ms. Weaver) And why does Facebook
  - 17 specifically tell users that it will not allow
  - 18 advertisers to individually identify them?
  - MR. BENJAMIN: Objection to form.
- 01:31:07 20 THE DEPONENT: I'm not sure how to answer
  - 21 this differently. But it's our system -- we built
  - 22 our system with that as a guiding principle because
  - 23 we think that's an important part of being on
  - 24 Facebook and so we have maintained that and these
- 01:31:20 25 are the some of the protections that help to

- 01:31:23 1 maintain that.
  - Q. (By Ms. Weaver) Is it because Facebook

- 3 has promised users privacy?
- 4 MR. BENJAMIN: Objection to form. Asked
- 01:31:33 5 and answered.
  - 6 THE DEPONENT: I think -- we are very up
  - 7 front with users that we show ads and how our
  - 8 system works, including this portion of it. And
  - 9 this helps ensure that that that is the case. I
- 01:31:51 10 don't think we've -- we relate it to a nondefined
  - 11 concept of privacy in the way that we are talking
  - 12 about it right now.
  - 13 Q. (By Ms. Weaver) So Facebook is not
  - 14 preventing advertisers from targeting individual
- 01:32:09 15 users because of privacy concerns; is that your
  - 16 testimony?
  - 17 A. That is not my testimony.
  - 18 MR. BENJAMIN: Objection. And yeah --
  - 19 MS. WEAVER: I'm just trying to get --
- 01:32:19 20 MR. BENJAMIN: We went out of order, I am
  - 21 sorry.
  - 22 Objection to form. Misstates.
  - 23 Argumentative.
  - You can answer.
- 01:32:25 25 THE DEPONENT: It's not my testimony.

- 01:32:26 1 Q. (By Ms. Weaver) I'm going to ask you
  - 2 again, is Facebook preventing advertisers from
  - 3 targeting individual users to protect users
  - 4 privacy?
- 01:32:42 5 A. We do not want -- we Donald low an
  - 6 advertiser to target an individual user and we
  - 7 don't tell advertisers who saw their ad so they
  - 8 learn about individual users and we -- and we state
  - 9 that to users.
- 01:32:59 10 Q. Just -- it's getting from frustrating in
  - 11 this deposition. Because you are just repeating
  - 12 the facts and I am trying to ask why.
  - 13 So what is the reason that Facebook built
  - 14 its platform so that in advertisers could not
- 01:33:17 15 target individual users?
  - MR. BENJAMIN: Objection to form.
  - 17 Argumentative. Asked and answered.
  - 18 You can answer.
  - 19 THE DEPONENT: This is one of our guiding
- 01:33:28 20 principles for our ad system. It's part of how we
  - 21 have built it. And how we help users understand
  - 22 and maintain their trust with Facebook.
  - Q. (By Ms. Weaver) Can you confirm that one
  - 24 of the reasons Facebook did that was to protect

## 01:33:43 25 users privacy?

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- 01:33:47 1 MR. BENJAMIN: Objection to form.
  - THE DEPONENT: Can you provide an example
  - 3 of what it is you mean by users privacy and
  - 4 protecting it?
- 01:33:56 5 Q. (By Ms. Weaver) Well, let me go back you
  - 5 said it was a guiding principle of Facebook, right?
  - 7 A. For building our ad system, yes.
  - 8 Q. Why is it a guiding principle.
  - 9 A. Because we wanted to ensure that people
- 01:34:14 10 both like trust the information they provide us and
  - 11 continue to use our platform and this was one of
  - 12 the areas where that was important.
  - 13 Q. Thank you.
  - 14 MR. BENJAMIN: Ms. Weaver we -- we have
- 01:34:29 15 been going for a good time over an hour would now
  - 16 be a good time for a break.
  - MS. WEAVER: Just give me a moment.
  - 18 MR. BENJAMIN: Of course.
  - 19 O. (By Ms. Weaver) You said that Facebook
- 01:34:45 20 at no time allowed advertisers to target a custom
  - 21 audience of 20 or fewer do you recall that?

- 22 A. Fewer than 20.
- 23 MR. BENJAMIN: Objection. Misstates
- 24 testimony.
- 01:34:55 25 Q. (By Ms. Weaver) What is the -- what is

- 01:34:58 1 lowest number that Facebook has permitted
  - 2 advertisers to target in terms of the size of the
  - 3 custom audience?
  - 4 A. I believe the customer list is 20.
- 01:35:14 5 Q. And what the lowest number for the other
  - 6 two kinds of audiences?
  - 7 A. I believe also 20.
  - 8 MS. WEAVER: Great. We can take a break.
  - 9 THE VIDEOGRAPHER: Okay we are off the
- 01:35:35 10 record it's 1:35 p.m.
  - 11 (Recess taken.)
  - 12 THE VIDEOGRAPHER: We are back on the
  - 13 record it's 1:55 p.m.
  - 14 (Exhibit 658 was marked for
- 01:55:04 15 identification by the court reporter and is
  - 16 attached hereto.)
  - 17 Q. I'm going to show what is going to be
  - 18 marked or what will be mark as Exhibit 658

- 19 MS. WEAVER: For the record it's bates
- 01:55:19 20 numbers FB-CA-MDL-0386899 through -907 and I think
  - 21 it's up.
  - 22 THE DEPONENT: I have it up.
  - Q. (By Ms. Weaver) Okay. Great.
  - When you have a moment please just tell
- 01:55:37 25 me what it is?

- 01:55:49 1 A. This was similar to alike a blog post
  - 2 that we put on business blog that explains machine
  - 3 learning in ad delivery.
  - 4 Q. And looking to the second page of the
- 01:56:01 5 document starting at Bates number -900 are the last
  - 6 three digits?
  - 7 A. Yup.
  - 8 Q. Do you see where it says first how does
  - 9 Facebook decide which ads to show people and then
- 01:56:13 10 there's an answer below the question, right?
  - 11 A. Yes.
  - 12 Q. And the second paragraph begins or second
  - 13 paragraph begins first advertisers choose their
  - 14 target audience through our self service tools.
- 01:56:29 15 Do you see that?

- 16 A. Yes.
- 17 Q. So specifically which target audience is
- 18 this document referring to here?
- 19 A. This refers to the audience selection
- 01:56:44 20 tools that an advertiser has in ads -- in something
  - 21 like ads manager. I don't know if you mean
  - 22 specifically what does the hyperlink go to.
  - Q. Is well that would be helpful too?
  - 24 A. Okay. That I don't know off the top of
- 01:56:59 25 my head so that might be -- yeah.

- 01:57:02 1 Q. Earlier you described different kinds of
  - 2 custom audiences do you recall that?
  - A. Yes.
  - 4 Q. So which audiences are being described
- 01:57:10 5 here?
  - 6 A. This paragraph describes the totality of
  - 7 the way an advertiser can select their audience
  - 8 it's not specific to custom audiences.
  - 9 Q. So when for example an advertiser wants
- 01:57:24 10 to use behaviors to target they first start here
  - 11 with this target audience; is the right?
  - 12 A. What this sentence refers to is in ads

- 13 manager when someone goes in to select their
- 14 desired audience. It's talking about all of the
- 01:57:42 15 options thereof which one is behaviors. One
  - 16 category is behaviors, custom audience is another
  - 17 category.
  - 18 Q. Okay. And looking at the next page
  - 19 ending at Bates number -901.
- 01:57:58 20 Do you see a Graph on that page?
  - 21 A. I see the total value equation drawn out.
  - Q. What is the total valuation equation?
  - 23 A. Total valuation is the description of our
  - 24 ad auction and the -- in ad delivery.
- 01:58:27 25 Q. I am sorry you said it's the description

- 01:58:29 1 of our ad auction in ad delivery?
  - 2 A. Our -- so -- sorry. Our ad delivery
  - 3 choosing the ad that we will show someone is based
  - 4 on our auction. Total value score is we make that
- 01:58:46 5 determination it's the machine learning that is
  - 6 used in ad delivery to make the determination of
  - 7 which ad wins the auction.
  - 8 Q. So the algorithm is performing an
  - 9 analysis of the three factors below the words total

- 01:59:00 10 value in the Graph to determine which ad is shown;
  - 11 is that right?
  - 12 A. Multiple -- yes machine learn models are
  - 13 performing that, yes.
  - 14 Q. And even though it says total value what
- 01:59:12 15 that actually means is the ad that is shown?
  - 16 A. Every ad that a person is eligible to
  - 17 see -- receives a total value score and then the ad
  - 18 that has highest told value score wins the auction.
  - 19 O. And when it wins the auction?
- 01:59:35 20 A. It do go.
  - Q. Is Facebook then paid revenue for the
  - 22 total value ad that is selected?
  - MR. BENJAMIN: Objection.
  - THE DEPONENT: The ad.
- 01:59:45 25 MR. BENJAMIN: Objection to form.

- 01:59:48 1 THE DEPONENT: Apologies. I didn't mean
  - 2 to interrupt your question there.
  - 3 The total value score is calculated the
  - 4 one with the highest total value wins the auction
- 01:59:58 5 and that is the ad we show a user. An advertiser
  - 6 pays for the performance of their ads and the

- 7 number of times an ad is shown.
- 9 So looking at the components of total
- 02:00:10 10 value there's the advertiser bid which we
  - 11 discussed, right?
  - 12 A. Yes.
  - 13 Q. And then it says estimated action rate.
  - 14 What is that?
- 02:00:20 15 A. The estimated action rate is the
  - 16 likelihood of someone taking the action that
  - 17 alliance with the advertisers objective.
  - 18 Q. And this document describes that as -- as
  - 19 the business objective, right?
- 02:00:38 20 A. Yes, that's the name of the ad objective.
  - Q. And that could be a click or a view or an
  - 22 impression or something else, righted?
  - 23 MR. BENJAMIN: Objection to form.
  - 24 THE DEPONENT: Yes, it could be that the
- 02:00:53 25 advertiser is trying to -- has an ad with a call to

- 02:00:58 1 action to go to a website to sign up to like a page
  - 2 for brand awareness those are there objectives why
  - 3 are they running this ad.

- 4 O. And how does Facebook calculate the
- 02:01:13 5 estimated action rate?
  - 6 A. The estimated action rate which is for
  - 7 the person we are thinking about showing this ad to
  - 8 is the likelihood that they will take that action
  - 9 and that's based on their activity on Facebook.
- 02:01:28 10 These are the machine-learning models that -- that
  - 11 are involved and they take into consideration
  - 12 active on Facebook so the pages and ad someone has
  - 13 interacted with. The way they have interacted with
  - 14 those and then also activity off of Facebook such
- 02:01:45 15 as on websites and apps.
  - 16 Q. And just to clarify testimony earlier.
  - 17 For detailed targeting the underlying activity that
  - 18 is the basis for determining interests and
  - 19 behaviors are those the same set of inputs and let
- 02:02:26 20 me just I will ask a bad question and I ask good
  - 21 one. I thought when we talked the first time the
  - 22 interest were not based on off platform activity
  - 23 they were limited to only pages and groups. But
  - 24 that the behaviors incurred behaviors are based on
- 02:02:42 25 basically almost all of the activity on Facebook

- 02:02:44 1 with some exemptions and off platform?
  - 2 MR. BENJAMIN: Objection to form.
  - 3 Q. (By Ms. Weaver) Is that roughly
  - 4 accurate?
- 02:02:57 5 A. You are correct that there are
  - 6 distinction between interest and behaviors.
  - 7 Interests are based on on-site page and add
  - 8 interaction behaviors are a broader set of activity
  - 9 on-site. Yeah, I think that clarifies kind of what
- 02:03:14 10 you were getting at.
  - 11 Q. Okay. And the behavior is also offsite,
  - 12 correct?
  - MR. BENJAMIN: Objection to form.
  - 14 THE DEPONENT: No, I -- so behavior
- 02:03:31 15 targeting options are not offsite. Earlier when we
  - 16 were discussing the behavioral targeting I was
  - 17 referencing the broader personalization including
  - 18 ad delivery.
  - 19 Q. (By Ms. Weaver) Okay. Now for the
- 02:03:45 20 estimated action rate, what is the core set of
  - 21 inputs and activities that help Facebook derive the
  - 22 estimated action rate?
  - 23 MR. BENJAMIN: Objection to form.
  - 24 THE DEPONENT: Because -- it is on-site
- 02:04:03 25 behavior so again people's activity on Facebook and

- 02:04:06 1 offsite based on our third -- our -- our business
  - 2 tools and information that's shared back with us.
  - 3 Q. (By Ms. Weaver) And then is an algorithm
  - 4 performing an analysis to predict the next possible
- 02:04:23 5 action a user might make?
  - 6 A. The estimated action rate is likelihood
  - 7 that the user takes an action and it uses those --
  - 8 the machine learning classifiers use that activity
  - 9 as input.
- 02:04:37 10 Q. Okay. And for ad quality I know we
  - 11 covered this, but for the record and clarity. Ad
  - 12 quality what is the core set of data that Facebook
  - 13 draws upon to determine ad quality?
  - 14 MR. BENJAMIN: Objection to form.
- 02:04:55 15 THE DEPONENT: It's the content of the
  - 16 ads so what an assessment for example, of click
  - 17 bait and our understanding of -- of the content of
  - 18 that ad as well as users feedback such as X outs
  - 19 which is reporting.
- 02:05:12 20 Q. (By Ms. Weaver) And the higher the ad
  - 21 quality, and the higher the estimated action rate,
  - 22 the better the total value for the tiffing, right?

- 23 A. The higher the ad quality and the higher
- 24 the estimated action rate the higher the total

02:05:35 25 value score will be.

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- - 2 correlate with increased revenue to Facebook?
  - 3 MR. BENJAMIN: Objection to form and
  - 4 scope.
- 02:05:49 5 THE DEPONENT: I think to -- to make this
  - 6 very clear the way we've built this total value
  - 7 score, helps ensure there it's not just the highest
  - 8 bidder that wins the action. Otherwise we would
  - 9 just way whoever is highest bidding gets the spot
- 02:06:06 10 on the ad by including estimated action rate and ad
  - 11 quality we are actually taking into consideration
  - 12 people's preferences of what they would want to
  - 13 see.
  - 14 And the quality of that ad. And it
- 02:06:18 15 actually means that the high e bidder is not -- not
  - 16 always going to be the winner. So better ads that
  - 17 are more relevant are the ones that within and then
  - 18 an advertiser pays for.
  - 19 Q. (By Ms. Weaver) And when Facebook is

- 02:06:32 20 serving better ads Facebook is more successful
  - 21 financially, right?
  - 22 MR. BENJAMIN: Objection to form. Asked
  - 23 and answered. Vague and outside of scope.
  - 24 THE DEPONENT: When we serve better ads
- 02:06:47 25 people's experience is better and that a common

- 02:06:51 1 goal of ours across the board.
  - Q. (By Ms. Weaver) Does Facebook's revenue
  - 3 increase when they make -- serve better ads?
  - 4 MR. BENJAMIN: Same objections.
- 02:07:04 5 THE DEPONENT: As compared to when we
  - 6 serve bad ads.
  - 7 Q. (By Ms. Weaver) Yes?
  - 8 A. I don't think we can -- I don't know that
  - 9 that is a comparison we make because we strive to
- 02:07:13 10 show good ads so I don't have a comparison point
  - 11 there.
  - 12 Q. Do advertisers put advertising on
  - 13 Facebook if they feel their advertisements are not
  - 14 effective?
- 02:07:23 15 MR. BENJAMIN: Objection to form. Calls
  - 16 for speculation. Outside of scope.

- 17 THE DEPONENT: If advertiser does not
- 18 performance on a ad they use that how they hen
- 19 those a spend their -- across platforms.
- 02:07:43 20 Q. (By Ms. Weaver) Okay. So is it -- one
  - 21 last question,.
  - The user activity just for the record,
  - 23 that Facebook uses to analyze and create the
  - 24 estimated action rate and the ad quality is not
- 02:08:02 25 limited only to public shared activity it includes

- 02:08:07 1 private activity as well, correct?
  - 2 MR. BENJAMIN: Objection to form. Asked
  - 3 and answered.
  - 4 THE DEPONENT: What I shared earlier is
- 02:08:18 5 relevant here as well. We don't have a die come
  - 6 tee and private and public active it's not limited
  - 7 in that manner because it's not the way our product
  - 8 works.
  - 9 Q. (By Ms. Weaver) Okay. Thank you.
- 02:08:28 10 (Exhibit 659 was marked for
  - 11 identification by the court reporter and is
  - 12 attached hereto.)
  - MS. WEAVER: We are going to mark tab

- 14 four Josh if you don't mind. We'll mark as
- 02:08:45 15 Exhibit 659 a document bearing Bates numbers
  - 16 03526129 through -6133.
  - 17 Q. (By Ms. Weaver) And while we are waiting
  - 18 for it to load, what is a keyword?
  - 19 A. I'm -- I'm not sure what we are
- 02:09:17 20 researching.
  - Q. Okay. Do you -- have you used the phrase
  - 22 keywords in the context of advertising at Facebook?
  - 23 MR. BENJAMIN: Objection to form.
  - 24 THE DEPONENT: It is a type of targeting
- 02:09:36 25 we offer. It is how we describe what an advertiser

- 02:09:39 1 inputs in a search to select the matching
  - 2 interests, so as I described an advertiser
  - 3 selects -- creates an ad selects -- selects their
  - 4 desired audience and they could input something
- 02:09:54 5 like Nike and see the interest that match that in
  - 6 order to select that interest that's effectively a
  - 7 search keyword.
  - 8 Q. (By Ms. Weaver) And does Facebook have
  - 9 limitations on what keywords advertisers can use?
- 02:10:14 10 A. So again to be clear it's not providing

- 11 them keyword the keyword is what an advertiser
- 12 chooses to search. They can search against
- 13 whatever they want. But we had interest that we
- 14 provide and if their keyword matches we'll render
- 02:10:30 15 that interest.
  - 16 Q. Okay. I am sorry. The question was does
  - 17 Facebook limit what keywords advertisers can use?
  - 18 A. Do you mean --
  - 19 MR. BENJAMIN: Objection to form.
- 02:10:42 20 Argumentative. Asked and answered.
  - 21 THE DEPONENT: Can you clarify what you
  - 22 mean.
  - Q. (By Ms. Weaver) I'm not saying Facebook
  - 24 is providing the keyword right?
- 02:10:49 25 A. I understand.

- 02:10:50 1 Q. Advertisers are using a keyword does
  - 2 Facebook say you can use these kinds of keywords?
  - 3 A. Can you clarify what you mean by from the
  - 4 advertiser perspective?
- 02:11:06 5 Q. You said a keyword can be used to search
  - 6 against whatever the advertiser is looking for.
  - 7 Right?

- 8 A. So an advertiser can input a word, a
- 9 keyword.
- 02:11:18 10 Q. Right.
  - 11 A. We don't limit what they search for but
  - 12 we limit what we will return to our interest and we
  - 13 don't provide anything as an interest. So there is
  - 14 a limitation on what an advertiser can use for
- 02:11:32 15 targeting. They could choose to search any number
  - 16 of words but those won't all have a matching
  - 17 interest that's actually used for targeting.
  - 18 Q. Okay. I think I understand the
  - 19 distinction you are making but I'm not sure.
- 02:11:48 20 Because it's one of two things.
  - 21 Can an advertiser search for a word but
  - 22 then it just won't be used in the advertisement; is
  - 23 that what you are saying because I don't understand
  - 24 the difference?
- 02:12:07 25 A. I'm saying -- the difference is we

- 02:12:09 1 have -- the interest that we provide as part of the
  - 2 selection of the target or the desired audience and
  - 3 in order for an advertiser to fin which interest
  - 4 they want to use for targeting, they can input a

- 02:12:22 5 search term. If that search term has no matches
  - 6 then there won't be anything that's a had as part
  - 7 of the criteria for their targeting. If it has a
  - 8 match they can then collect from not matches to say
  - 9 I want -- if I type in shoes as an advertiser, and
- 02:12:41 10 there is an interest that matches that keyword
  - 11 search, then we'll show them shoes and they can
  - 12 select that interest in order to -- to define their
  - 13 target audience.
  - 14 Q. Right. If are there any limitations on
- 02:12:55 15 the search terms that will actually be employed by
  - 16 Facebook other than it's not one of the interests?
  - 17 MR. BENJAMIN: Objection.
  - 18 THE DEPONENT: The only --
  - 19 MR. BENJAMIN: Objection to form.
- 02:13:07 20 THE DEPONENT: -- the way we use those
  - 21 search terms is to render an interest for the
  - 22 advertiser to choose from. If it doesn't have a
  - 23 match there's no other use for that keyword search
  - 24 term. They have input it.
- 02:13:23 25 Q. (By Ms. Weaver) Does Facebook have any

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02:13:25 1 restriction on what search terms advertisers can

- 2 use as?
- 3 MR. BENJAMIN: Objection.
- 4 Q. (By Ms. Weaver) As a matter of policy
- 02:13:34 5 use objection to form. Asked and answered. Scope.
  - 6 THE DEPONENT: There isn't a limit for
  - 7 what an advertiser can type in to the search box.
  - 8 It has to actually match -- in order to be used for
  - 9 targeting they have to select an interest from
- 02:13:54 10 those search results.
  - 11 Q. (By Ms. Weaver) But you are not aware
  - 12 for example certain words blacklisted or I hear the
  - 13 new phrase deny listed by Facebook for use in
  - 14 keyword phrases?
- 02:14:12 15 MR. BENJAMIN: Objection to form.
  - THE DEPONENT: No.
  - 17 Q. (By Ms. Weaver) Okay. We'll, let's take
  - 18 a look at Exhibit 658. Oh, no. Sorry 659.
  - 19 Apologies?
- 02:14:28 20 A. I have it up.
  - Q. And the first question is, have you seen
  - 22 this document before?
  - 23 A. Yes, I saw it as part of prep for this
  - 24 deposition.
- 02:14:39 25 Q. Okay. In the second sentence well, let's

- 02:14:42 1 start do you see the first -- the email on top
  - 2 says, Hi John, as a technical matter, you can
  - 3 target based on specific keywords in a status
  - 4 update or group membership. However, our ad
- 02:14:55 5 guidelines prohibitive verse from "implying by
  - 6 targeting a users's personal characteristics within
  - 7 the following categories" and then it list race or
  - 8 ethnic origin. Religion or physical belief age,
  - 9 sexual orientation or sexual life, gender,
- 02:15:12 10 disability or medical continue, financial status or
  - 11 information, membership in a trade union and
  - 12 criminal record.
  - 13 Do you see that?
  - 14 A. Yes.
- 02:15:23 15 Q. So is it true that Facebook prohibits
  - 16 advertisers from using the word keys relating to
  - 17 the topics described there?
  - 18 A. This policy --
  - 19 MR. BENJAMIN: Objection.
- 02:15:39 20 THE DEPONENT: -- this policy prohibits
  - 21 advertisers, this is one our content policies and
  - 22 disallows advertiser from calling out any of these
  - 23 attributes in the content of their ad.

Q. (By Ms. Weaver) And what -- why does

02:15:54 25 Facebook have that policy?

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- 02:15:59 1 A. This policy exists because we understand
  - 2 that people don't want their attributes called out
  - 3 in an ad.
  - 4 Q. And how long has this been policy been in
- 02:16:09 5 effect?
  - 6 A. Many years. This is like pre2008 policy.
  - 7 Q. And among the attributes that users don't
  - 8 want call out in an ad is age, and, again,
  - 9 derivative identity, right?
- 02:16:28 10 A. Correct.
  - 11 O. Now when we talked about core audiences
  - 12 you said that for core audiences Facebook targets
  - 13 age and, again, derivative, right?
  - 14 A. Yes.
- 02:16:38 15 Q. Why is there a distinction?
  - 16 A. Again, this is about the ad content. An
  - 17 ad content cannot call out people's specific
  - 18 attributes.
  - 19 Q. What does -- how does core audience
- 02:16:54 20 function?

- 21 A. It's not about content.
- 22 MR. BENJAMIN: Objection -- objection to
- 23 form.
- 24 THE DEPONENT: It's not about the content

02:17:00 25 of an ad.

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- 02:17:03 1 Q. (By Ms. Weaver) Meaning people are being
  - 2 targeted by their age or gender, but the content of
  - B the ad doesn't reveal it?
  - 4 A. We -- we don't allow content of the ad to
- 02:17:13 5 call out these attributes. That is completely
  - 6 separate from the audience selection by the
  - 7 advertiser.
  - 8 Q. So people can be targeted by their age or
  - 9 gender, but Facebook doesn't want the ad itself to
- 02:17:31 10 reveal to the user, that they are being targeted by
  - 11 their age or gender among other things; is that
  - 12 right?
  - 13 MR. BENJAMIN: Objection to form.
  - 14 Argumentative. Mischaracterizes.
- 02:17:45 15 THE DEPONENT: We provide transparency
  - 16 into the targeting options so a user has -- why I
  - 17 am seeing this and they would be able to understand

- 18 the targeting options so that's not the rational
- 19 they still have that information there is content
- 02:18:02 20 policy.
  - Q. (By Ms. Weaver) When people receive an
  - 22 ad, do they know in the moment that they receive
  - 23 that they are being target because of their age or
  - 24 gender especially if the ad hides that fact by not
- 02:18:18 25 referencing it?

- 02:18:19 1 MR. BENJAMIN: Objection to form.
  - THE DEPONENT: I think that assumes that
  - 3 all ads would reference it. But the -- the user
  - 4 would see an ad, they know that ads are sponsored
- 02:18:30 5 content and involve targeting they also have the
  - 6 tool to see those specific parameters.
  - 7 Q. (By Ms. Weaver) Okay. Let me ask this,
  - 8 why is it that Facebook concluded that people don't
  - 9 want to see ads that on their face target by raise
- 02:18:51 10 ethnic religion or philosophical belief, age,
  - 11 secret yawl orientation or sexual life, gender
  - 12 identity, disability or medical continue, including
  - 13 physical or mental health, financial status or
  - 14 information, membership in a trade union and

- 02:19:06 15 criminal record?
  - 16 MR. BENJAMIN: Objection to form and
  - 17 scope.
  - 18 THE DEPONENT: We understood that people
  - 19 did not like those ads and we made a policy to not
- 02:19:17 20 allow that -- the content to call out people's
  - 21 attributes.
  - Q. (By Ms. Weaver) How did Facebook decide
  - 23 that people do not like the ads that focus on the
  - 24 attributes that I just described?
- 02:19:31 25 MR. BENJAMIN: Objection to form. Scope.

- 02:19:34 1 THE DEPONENT: In the content, this is in
  - 2 my personal experience, because it -- not related
  - 3 to ad targeting we understand from my -- the way I
  - 4 have understood this policy, we measure X outs
- 02:19:51 5 et cetera and so we know which ads have an X out
  - 6 and this is example of where that inform our
  - 7 policies.
  - 8 Q. (By Ms. Weaver) For the record what do
  - 9 you mean by "out"?
- 02:20:01 10 A. Oh apologies, reports.
  - 11 Q. I am sorry was that?

- 12 A. When -- when someone sees an ad they have
- 13 the ability to say, I don't want to see this ad.
- 14 Is one way that we understand ads that people do
- 02:20:15 15 and don't want to see as -- from my understanding
  - 16 that's how we develop policies like this.
  - 17 Q. And for this policy which you said was
  - 18 developed in pre2008 what was the information that
  - 19 Facebook relied on in determining that people don't
- 02:20:31 20 want to see ads that -- in their content target
  - 21 them for these characteristics?
  - 22 A. I'm not an expert in our ad content
  - 23 policies and their early development that's outside
  - 24 of ad targeting. The -- but in general, we use
- 02:20:51 25 feedback signals, X outs ask an example of that.

- 02:20:56 1 Q. So in fact Facebook may target users
  - 2 because of raise or ethnic origin, religion or
  - 3 physical belief, age, sexual orientation or sexual
  - 4 life, general integer identity, disability or
- 02:21:12 5 medical continue including or physical or mental
  - 6 health, financial status or information, membership
  - 7 in a trade union and criminal record.
  - 8 But Facebook's policy is just not make it

- 9 apparent in the content of the ad; is that fair?
- 02:21:30 10 MR. BENJAMIN: Objection. Argumentative.
  - 11 Misstates. Asked and answered. Outside the scope.
  - 12 THE DEPONENT: No that's not accurate.
  - 13 We don't provide targeting options based on this
  - 14 data on many -- a lot of the data you read out.
- 02:21:47 15 And this is specifically a content policy, it is
  - 16 distinct from the targeting operations we provide.
  - 17 Q. (By Ms. Weaver) Facebook does target
  - 18 people based on age and, again, derivative,
  - 19 correct?
- 02:21:58 20 A. Correct the rest of the list, no.
  - 21 O. Does Facebook draw inferences about users
  - 22 financial status or information to determine what
  - 23 action they might next take?
  - 24 A. No.
- 02:22:13 25 MR. BENJAMIN: Objection to form.

- 02:22:14 1 Q. (By Ms. Weaver) Does Facebook use any of
  - 2 the categories identified in Exhibit 659 in its
  - 3 analyses about estimated actions?
  - 4 A. These categories we don't have. All have
- 02:22:34 5 these categories that we do not collect raise or

- 6 ethnic origin. We don't collect disability or
- 7 medical continue, financial status, trade union
- 8 membership and criminal record.
- 9 And we don't create inferences about
- 02:22:49 10 these -- any of these to determine the attribute or
  - 11 predict someone's attribute.
  - 12 O. Is it your testimony on behalf of
  - 13 Facebook that it no point in time, did Facebook
  - 14 infer ethnic origin or race about users?
- 02:23:06 15 A. Yes, we did inference people's
  - 16 characteristic or their ethnic oration origin. And
  - 17 maybe I should -- I was -- no, we did not. I was
  - 18 saying yes to your question to clarify.
  - 19 Q. Do you see a reference here to the
- 02:23:34 20 minimum cluster size in this document under
  - 21 there's -- there's a box here that says redacted
  - 22 privilege.
  - 23 A. Yes, see the reference.
  - Q. What is "minimum cluster size"?
- 02:23:47 25 A. This is collar to what we discussed about

- 02:23:49 1 the minimum audience sides we will allow for an ad
  - 2 to run or we require.

- 3 Q. Sorry. What's the difference between
- 4 minimum cluster size and minimum audience size?
- 02:24:03 5 A. I understand those to be the same.
  - 6 Q. Okay. So a little bit lower on that page
  - 7 the last full paragraph do you see John patent
  - 8 wrote to Rob Sherman so understand the idea that if
  - 9 you provide info on Facebook even if it is
- 02:24:30 10 medically extensive it is ad targetable.
  - 11 Do you see that?
  - 12 A. I see it.
  - 13 Q. And you disagree with that statement?
  - 14 A. Yes.
- 02:24:43 15 Q. So what does Facebook do to prevent
  - 16 information that is medically sensitive being used
  - 17 to create inferences about users?
  - 18 MR. BENJAMIN: Objection. Form.
  - 19 THE DEPONENT: We don't collect medical
- 02:25:01 20 information and we also separately do not inference
  - 21 someone's medical continue.
  - Q. (By Ms. Weaver) When you say you don't
  - 23 collect it, what do you mean?
  - A. I mean that there isn't like a place
- 02:25:18 25 where someone says, similar -- as an example, to

- 02:25:22 1 reference gender, we have part of profile is gender
  - 2 or age and someone provides that. There is not a
  - 3 similar medical continue field that people fill out
  - 4 or provide.
- 02:25:36 5 Q. Right. But if there are conditions for
  - 6 example, that, you know, as marketer or something
  - 7 like that. Does -- does Facebook infer things
  - 8 about users based on that information?
  - 9 MR. BENJAMIN: Objection.
- 02:25:54 10 THE DEPONENT: We don't -- we don't have
  - 11 that information.
  - 12 Q. (By Ms. Weaver) What if I click on a
  - 13 page for a medical provider, what does Facebook do
  - 14 with that information?
- 02:26:04 15 MR. BENJAMIN: Objection --
  - 16 THE DEPONENT: We --
  - 17 MR. BENJAMIN: -- to form.
  - 18 THE DEPONENT: We would know you clicked
  - 19 on a page from a medical provider. We are not
- 02:26:10 20 making an inference about your medical continue.
  - Q. (By Ms. Weaver) And what does Facebook
  - 22 do with the information that I clicked on a page
  - 23 for a medical provider?
  - 24 MR. BENJAMIN: Objection to form and

02:26:24 25 scope.

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- 02:26:27 1 THE DEPONENT: Within the context of ads,
  - 2 as we have discussed page engagement can -- can
  - 3 inform the future ads people see.
  - 4 Q. (By Ms. Weaver) And what if my friend
- 02:26:45 5 posts something about a cancer survivor group and I
  - 6 like it. Does that activity which would otherwise
  - 7 be included in behaviors inform what behaviors I
  - 8 might be included in?
  - 9 MR. BENJAMIN: Objection to form.
- 02:27:16 10 THE DEPONENT: We don't have a behavior
  - 11 targeting option that is about -- like cancer,
  - 12 friends of cancer survivors that's not a targeting
  - 13 option.
  - 14 Q. (By Ms. Weaver) Does Facebook use that
- 02:27:34 15 information in determining my estimated actions?
  - 16 A. We don't use the content of -- of your
  - 17 friend's post. That's not something we use
  - 18 currently.
  - 19 O. Did Facebook use the contents of my
- 02:27:58 20 friend's post at any point in time from 2007 to the
  - 21 present?

- 22 A. No.
- Q. So why did you say currently?
- 24 MR. BENJAMIN: Objection. Form.

02:28:10 25 Argumentative.

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- 02:28:13 1 THE DEPONENT: I was -- I was just
  - 2 honestly repeating the tense of the question, it
  - 3 wasn't meant to be an exclusion.
  - 4 Q. Do you understand how the algorithms work
- 02:28:30 5 and what inputs they use to create estimated
  - 6 actions?
  - 7 MR. BENJAMIN: Objection to form.
  - 8 Compound. Vague.
  - 9 THE DEPONENT: I understand the machine
- 02:28:45 10 learning that -- that -- that is how we generate
  - 11 the estimated action rate and the inputs that they
  - 12 use.
  - Q. (By Ms. Weaver) And what are the inputs
  - 14 for the machine learning that you just mentioned?
- 02:28:58 15 A. On-site activity, and offsite activity
  - 16 through our business tools.
  - 17 Q. And specifically what on-site activity?
  - 18 MR. BENJAMIN: Objection to form. Asked

- 19 and answered.
- 02:29:11 20 THE DEPONENT: The ad engagement, page
  - 21 engagement, people's activity, the info they
  - 22 provide to us, those are all parts of that
  - 23 estimated action rate.
  - Q. (By Ms. Weaver) Does it consider what
- 02:29:22 25 actions I take with regard to content my friend's

- 02:29:25 1 post?
  - 2 A. No.
  - 3 Q. Does it consider the contents of what I
  - 4 post?
- 02:29:51 5 A. No.
  - 6 Q. Okay. I'm going to return to a topic we
  - 7 began a while ago on page three of Exhibit 656.
  - 8 We were discussing Facebook's policies
  - 9 restricting advertiser use of advertising related
- 02:30:27 10 data, i.e. limiting it to its use case.
  - 11 Do you recall that?
  - 12 A. I am sorry on 656.
  - 13 Q. I am sorry. Let me make sure I have the
  - 14 right, 657. I am sorry that's my fault?
- 02:30:43 15 A. Yes, I have it up.

- 16 Q. So do you recall the bullet point on
- 17 page 3 that we began discussing but did not
- 18 complete?
- 19 A. Yes. Sorry I am trying to find the exact
- 02:30:54 20 wording on here.
  - Q. No problem.
  - 22 A. Yes.
  - 23 O. So what does -- what are Facebook's
  - 24 policies restricting advertisers use of advertising
- 02:31:14 25 related data?

- 02:31:18 1 A. There a few relevant policies as an
  - 2 example, our customer list policies limits the way
  - 3 people can use that information. Our business
  - 4 tools do as well. And we also require -- do not
- 02:31:33 5 allow advertisers to use information that they
  - 6 under from the ad for purposes other than
  - 7 understanding the performance of their ad.
  - 8 Q. What policies in particular are you
  - 9 referring to?
- 02:31:50 10 MR. BENJAMIN: Objection.
  - 11 THE DEPONENT: I don't. I can look up
  - 12 the exact like policy number -- do you know like in

- 13 those terms which number.
- 14 Q. (By Ms. Weaver) Just descriptively, what
- 02:32:02 15 policies are you referring to?
  - 16 A. All of those terms have policies that
  - 17 restrict how an advertiser and the requirements for
  - 18 that data and disallow an advertiser from taking
  - 19 specific actions with it. So as an example our
- 02:32:21 20 policy our ad guidelines ad policies disallow
  - 21 advertiser from using ad targeting to harass or
  - 22 provoke people it also disallows advertisers from
  - 23 taking information to -- for purposes of other than
  - 24 understanding the performance of their ad.
- 02:32:40 25 Q. Okay. What we are talking about here,

- 02:32:44 1 are the advertising using advertising related data
  - 2 beyond a use case, right?
  - 3 A. Yes.
  - 4 O. What is a use case?
- 02:32:54 5 A. To place the ad --
  - 6 Q. You are saying --
  - 7 A. -- in this context.
  - 8 Q. For advertisers, the use case should be
  - 9 limited solely to placing an ad; is that right?

- 02:33:06 10 A. Placing the ad and the -- the performance
  - 11 of that ad.
  - 12 Q. And what does advertising related data
  - 13 mean in this context?
  - 14 A. Related to ad targeting and ad delivery
- 02:33:26 15 it means the way an advertiser sets up their --
  - 16 their ad and the performance of that ad.
  - 17 Q. Does that exclude information about who
  - 18 receives the ad and the -- the engagement or action
  - 19 rate?
- 02:33:52 20 MR. BENJAMIN: Objection to form.
  - 21 THE DEPONENT: Let me know if this
  - 22 answers your question. We -- we -- we don't
  - 23 provide advertiser with -- who has seen similar ad
  - 24 an individual user level that's not something we
- 02:34:04 25 give them.

- 02:34:05 1 They understand -- they are provided
  - 2 performance metrics that are aggregated and those
  - 3 are for the purpose of understanding the
  - 4 performance of that ad, that's the use case.
- 02:34:17 5 Q. (By Ms. Weaver) So at some point in
  - 6 time, when the audience, minimum audience No. was

- 7 20, an advertiser could identify 20 people from its
- 8 customer list, run an ad and then Facebook would
- 9 provide aggregated mean aggregated for those 20
- 02:34:36 10 people how many people took action for example; is
  - 11 that right?
  - 12 MR. BENJAMIN: Objection to form. Calls
  - 13 for speculation.
  - 14 THE DEPONENT: An advertiser could create
- 02:34:49 15 a custom customer list it would have to have at
  - 16 least 20 matches in order for it to be used in an
  - 17 ad. They could then run that ad and we would show
  - 18 the reporting metrics related to that ad. Again in
  - 19 an aggregated form.
- 02:35:05 20 Q. (By Ms. Weaver) And what are the
  - 21 reporting metrics that Facebook would provide for
  - 22 that ad?
  - 23 A. These were the metrics categories that --
  - 24 that I covered earlier of impressions, so number of
- 02:35:17 25 impressions, number of clicks, ad spend, ad score.

- 02:35:24 1 Q. And for these 20 people, how many
  - 2 categories of interests could an advertiser seek?
  - 3 MR. BENJAMIN: Objection to form.

- 4 Misstates.
- 02:35:40 5 THE DEPONENT: Can you clarify what you
  - 6 mean by an advertiser could seek interests.
  - 7 Q. (By Ms. Weaver) Sure.
  - 8 So I'm -- here's my audience of 20, and I
  - 9 want to identify the following ten categories of
- 02:35:52 10 interests.
  - Is there a cap on the number of interests
  - 12 or behaviors that an advertiser could identify to
  - 13 target the 20 people?
  - 14 A. An advertiser can use a customer list and
- 02:36:09 15 they use additional targeting options with that
  - 16 list. But an ad cannot ad audience cannot be
  - 17 narrowed be -- below the threshold in order for us
  - 18 to deliver it.
  - 19 Q. I'm not talking about the audience now
- 02:36:24 20 I'm talking about the characteristics that are
  - 21 being focused on, right the interests or the
  - 22 behaviors. Was there a cap on the behaviors that
  - 23 could be used to target the audience?
  - A. There is not a cap in the number of
- 02:36:40 25 behaviors someone can choose. But if choosing

- 02:36:42 1 those behaviors drops the audience below a certain
  - 2 level, we will not deliver that ad.
  - Q. And what is the level below which it may
  - 4 not -- not drop?
- 02:37:01 5 A. It is 100 people.
  - 6 Q. And why is the limit 100 people?
  - 7 A. We have done assessments of -- of across
  - 8 our system to ensure that people aren't able to
  - 9 re-identify that was one of the -- that was a
- 02:37:17 10 threshold that we felt comfortable with as a
  - 11 prevention.
  - 12 Q. When was the 100 people threshold
  - 13 established?
  - 14 A. I believe it was 2018 and before that
- 02:37:30 15 there was a threshold, it was lower but there's
  - 16 always been a threshold.
  - 17 O. What was the lowest threshold that that
  - 18 has existed?
  - MR. BENJAMIN: Objection to form.
- 02:37:46 20 THE DEPONENT: 20 I believe.
  - Q. (By Ms. Weaver) And when -- for what
  - 22 years was the 20 threshold operative?
  - A. I believe up until between 2016 and 2018
  - 24 I'm not sure if we went straight to 100 or -- or in
- 02:38:21 25 between.

- 02:38:23 1 O. And when the threshold was 20 could
  - 2 advertisers use Geo location as a target?
  - 3 A. Advertisers can use location targeting.
  - 4 If the ad audience after any targeting selection
- 02:38:51 5 drops below the threshold of 100, it would then not
  - 6 deliver. We don't deliver that ad.
  - 7 Q. That's the current policy, correct?
  - 8 A. Can -- yes.
  - 9 Q. But if the threshold was 20 could an
- 02:39:11 10 identify advertiser use location targeting?
  - 11 A. Yes, again, they can select location and
  - 12 if it ever drops below 20 that ad would not
  - 13 deliver.
  - 14 Q. And when the threshold was 20, an
- 02:39:26 15 advertiser could use Geo location in combination
  - 16 with an unlimited number of interests or behaviors
  - 17 if they were within Facebook's roster of them,
  - 18 correct?
  - 19 MR. BENJAMIN: Objection to form.
- 02:39:41 20 THE DEPONENT: They can use any number to
  - 21 set up their targeting audience. If it ever drops
  - 22 below the threshold it will not deliver regardless

- 23 of how many options they have selected.
- Q. (By Ms. Weaver) So to be clear, until
- 02:39:57 25 2016 or 2018 when the threshold was raised to 100,

- 02:40:02 1 an advertiser could identify its audience of up to
  - 2 20. It could identify Geo location and then it
  - 3 could identify interest or behaviors and as many as
  - 4 possible but not restriction. And then Facebook
- 02:40:20 5 would run and return -- would run the ad and return
  - 6 metrics to the advertiser assuming they did not go
  - 7 below the threshold, and provide information about
  - 8 engagement, view, clicks, et cetera, right?
  - 9 A. Can we clarify --
- 02:40:40 10 MR. BENJAMIN: Objection -- objection to
  - 11 form.
  - 12 THE DEPONENT: At the top there when --
  - 13 when you were reading through or -- or top of your
  - 14 question, identify -- I think the first part you
- 02:40:51 15 said identify 20, what did you mean there.
  - Q. (By Ms. Weaver) So let's assume the --
  - 17 in this first scenario it's a user list.
  - 18 A. So a custom audience.
  - 19 Q. Yes.

- 02:41:03 20 A. Customer list I see. So an advertiser
  - 21 could upload a customer list and they could use the
  - 22 other targeting options to create their ad --
  - 23 desired audience for their ad it did not drop below
  - 24 the threshold we would deliver that ad and we would
- 02:41:19 25 provide performance metrics but those performance

- 02:41:23 1 metrics do not include who saw the ad. Regardless
  - 2 of how big the audience is or isn't. We don't
  - 3 provide who saw the ad to an advertiser.
  - 4 O. And in addition to user list there were
- 02:41:38 5 two other kinds of audience, right?
  - 6 A. Within --
  - 7 MR. BENJAMIN: Objection. Form.
  - 8 Q. (By Ms. Weaver) There's website app
  - 9 custom audience and there's also engagement custom
- 02:41:51 10 audience, right?
  - 11 A. There two other types of custom audience,
  - 12 yes.
  - 13 Q. The same would apply for those kind of
  - 14 audience well, as the 20 cap, maybe 100 cap for
- 02:42:01 15 now. Unlimited interest in behaviors can be
  - 16 targeting including Geo location, right?

- 17 A. Those don't have the same upload
- 18 functionality as a customer list. But they also
- 19 have an audience minimum and to be clear the
- 02:42:16 20 audience minimum is of the total targeting option
  - 21 selected.
  - 22 So it could be website custom audience
  - 23 with a number of interests. Or with no interests
  - 24 in either scenario, there is -- it has to be above
- 02:42:31 25 a minimum threshold in order to run the ad.

- 02:42:35 1 Q. What's the minimum threshold?
  - 2 A. 100.
  - 3 Q. And it used to be 20?
  - 4 A. Yes.
- 02:42:43 5 Q. Until 2016 or 2018?
  - 6 A. Correct.
  - 7 Q. You said they don't have the same upload
  - 8 functionality. What do you mean?
  - 9 A. I meant for customer list the advertiser
- 02:42:57 10 is uploading a list of their existing customers,
  - 11 that's distinct from engagement custom audience or
  - 12 a website custom audience, they don't -- they are
  - 13 not based on a customer list that the advertiser

- 14 provides.
- - 16 identifier?
  - 17 MR. BENJAMIN: Objection to form.
  - 18 THE DEPONENT: Yes, every user has their
  - 19 own unique UID.
- - 21 provide Facebook user IDs in -- in this process of
  - 22 targeting advertising through custom audiences,
  - 23 right?
  - A. We do not provide UIDs to advertisers.
- 02:43:49 25 Q. Does Facebook take any steps to ensure

- 02:43:51 1 that the advertiser who are identifying their
  - 2 target audience do not process Facebook user IDs?
  - A. Let me know if gets at what your question
  - 4 is asking. When an advertiser uploads a customer
- 02:44:07 5 list, we hash their information so we don't actual
  - 6 knee know exactly what -- what the -- the
  - 7 identifier we are not learning anything through
  - 8 that upload. And after we match it to users, we
  - 9 don't provide anything back to the advertiser about
- 02:44:24 10 those users, including and definitely not their

- 11 user ID.
- 12 O. Facebook is aware that data broker
- 13 already have Facebook user IDs, right?
- 14 MR. BENJAMIN: Objection to form and
- 02:44:37 15 scope.
  - 16 THE DEPONENT: I can't speak to that I'm
  - 17 not aware.

  - 19 A. If my personally capacity I don't know.
- 02:44:45 20 Q. So the representation here is that
  - 21 Facebook is not providing any personally
  - 22 identifiable information through the targeted
  - 23 advertising process, right?
  - 24 MR. BENJAMIN: Objection to form. Vague.
- 02:44:58 25 THE DEPONENT: We don't provide

- 02:44:59 1 advertisers information about the users who -- who
  - 2 saw their ad and how to identify those users.
  - 3 Q. (By Ms. Weaver) Okay. Well, let's go
  - 4 back to Exhibit 658 and turn to page 5. I will
- 02:45:20 5 read into the record at Bates number -907 "we don't
  - 6 share information with advertiser that personally
  - 7 identifies individuals unless they given us

- 8 permission."
- 9 Do you see that?
- 02:45:34 10 A. Yes.
  - 11 Q. And -- and that's a core promise that
  - 12 Facebook has made to users from 2007 to the
  - 13 present, right?
  - 14 A. Correct.
- 02:45:42 15 Q. And what does it mean in your
  - 16 understanding to personally identify an individual?
  - 17 A. To tell an advertiser who saw their ad.
  - 18 Q. So to you it just would be saying Leslie
  - 19 weaver saw this ad and that would be compliant with
- 02:46:01 20 this policy?
  - 21 MR. BENJAMIN: Objection to form.
  - 22 THE DEPONENT: I am sorry I don't follow
  - 23 what you mean.
  - Q. (By Ms. Weaver) You are saying it to
- 02:46:13 25 tell an advertiser who saw their ad would be

- 02:46:18 1 providing personally identifiable information,
  - 2 right?
  - 3 A. Yes, and we do not do that.
  - 4 Q. And what do you mean when you say to tell

- 02:46:25 5 a user who saw an ad?
  - 6 A. I am sorry --
  - 7 Q. What do you mean to tell an advertiser
  - 8 who saw their ad.
  - 9 A. We don't tell them individual user level
- 02:46:38 10 information about who saw -- about the users who
  - 11 saw their ad.
  - 12 Q. But when the limit was 20 people you
  - 13 would tell them that 20 people saw their ad and
  - 14 they would have already targeted certain data
- 02:46:57 15 points like Geo location and other attributes,
  - 16 correct?
  - 17 MR. BENJAMIN: Objection to form.
  - 18 Misstates.
  - 19 THE DEPONENT: After they have created
- 02:47:07 20 their audience, they would know how many people saw
  - 21 their ad. But that would have to be again, in
  - 22 order to deliver that audience it has to be above
  - 23 the threshold.
  - Q. (By Ms. Weaver) Which was 20 people for
- 02:47:22 25 most of the class period, right?

- THE DEPONENT: Through the years, yes
- 3 until 2016 or 2018.
- 4 Q. (By Ms. Weaver) So a separate question,
- 02:47:35 5 I was asking is -- is Facebook aware that in fact
  - 6 many third parties have data that associates user
  - 7 Facebook's IDs with individuals?
  - 8 MR. BENJAMIN: Objection to form and
  - 9 scope.
- 02:47:56 10 THE DEPONENT: I don't know about whether
  - 11 third parties have UIDs.
  - 12 Q. (By Ms. Weaver) Is that a concern of the
  - 13 Facebook's targeted advertising policy team?
  - 14 MR. BENJAMIN: Objection to form and
- 02:48:09 15 scope.
  - 16 THE DEPONENT: We don't provide UIDs
  - 17 through our ad system and do -- we do -- we don't
  - 18 provide it purposefully, so that it's not available
  - 19 to an advertiser, that's what this statement
- 02:48:25 20 indicates.
  - 21 So it would -- yes, but it's not
  - 22 something we do and we purposely don't do it.
  - Q. (By Ms. Weaver) And why is that?
  - A. If we provided a UID they would be able
- 02:48:42 25 to tie that back to an individual and we

- 02:48:44 1 specifically state that we don't give information
  - 2 to advertisers about who saw the ad specifically
  - 3 about the individual who saw the ad.
  - 4 Q. What steps did Facebook take to ensure
- 02:49:01 5 that third parties who are were conducting
  - 6 targeting advertising in groups of 20 did not
  - 7 possess Facebook user ID or a which to re-identify
  - 8 users?
  - 9 MR. BENJAMIN: Objection to form.
- 02:49:22 10 THE DEPONENT: I think we have to
  - 11 differentiate -- and I -- I might be missing the
  - 12 link here. The possessing UID within our ad system
  - 13 we don't provide UIDs an advertisers has to a meet
  - 14 a minimum threshold in order to run the ad and the
- 02:49:39 15 metrics we provide performance metrics are
  - 16 aggregated. So we don't tell them information
  - 17 about who saw the ad specifically and so there
  - 18 wouldn't be something to relate back to a UID
  - 19 whether they possess or not and they wouldn't gain
- 02:49:54 20 access to the UID through our ad delivery.
  - 21 O. (By Ms. Weaver) I understand you are
  - 22 saying that Facebook did not directly provide
  - 23 Facebook users IDs.

Wasn't Facebook aware that during the 02:50:06 25 close period at multiple points, third parties who

- 02:50:10 1 advertised on Facebook, had obtained Facebook's
  - 2 user IDs?
  - 3 MR. BENJAMIN: Objection to form. Asked
  - 4 and answered. Foundation.
- 02:50:21 5 THE DEPONENT: I'm just not sure what --
  - 6 one, I don't know the scenarios we are talking
  - 7 about. They are outside of the ads -- my expertise
  - 8 on ads.
  - 9 And I'm not certain the significance of
- 02:50:38 10 how the UID plays into what we provide from ads
  - 11 where it is -- has to a meet a minimum threshold
  - 12 and we only provide aggregated performance metrics.
  - Q. (By Ms. Weaver) So you sit here today
  - 14 you are not aware that anybody outside of
- 02:50:59 15 Facebook's scraped or obtain Facebook user IDs; is
  - 16 that true?
  - 17 MR. BENJAMIN: Objection to form.
  - 18 THE DEPONENT: I'm not an expert on all
  - 19 of the scraping or nonscraping that's occurred at
- 02:51:14 20 Facebook that's.

- Q. (By Ms. Weaver) I didn't ask that
- 22 whether you were an expert.
- I asked whether you were aware under oath
- 24 as you sit here today, that third parties have
- 02:51:24 25 scraped Facebook user IDs off the platform and

- 02:51:30 1 policy issues possess them?
  - 2 MR. BENJAMIN: Objection to form and
  - 3 scope.
  - 4 THE DEPONENT: I could not identify from
- 02:51:39 5 my personal capacity examples of what you are
  - 6 talking -- talking about in any form that I would
  - 7 speak to or -- or I am aware of.
  - 8 Q. (By Ms. Weaver) As you sit here today
  - 9 you are saying you are unaware that users scraped
- 02:51:54 10 Facebook user IDs off the platform. You are under
  - 11 oath?
  - 12 MR. BENJAMIN: Objection to form
  - 13 argumentative. Asked and answered. Beyond the
  - 14 scope.
- 02:52:07 15 THE DEPONENT: I'm truly -- I'm not able
  - 16 to speak to and I don't know scenarios of user ID
  - 17 scraping.

- 18 Q. (By Ms. Weaver) And you are part of the
- 19 privacy policy team for advertising, right?
- 02:52:22 20 A. Yes.
  - Q. How many people are on that team?
  - 22 A. For advertising specifically?
  - 23 Q. Yes.
  - 24 A. There -- I believe there are currently
- 02:52:37 25 ten of us.

- 02:52:40 1 Q. And who the lead on that team?
  - 2 A. Andrew Howard.
  - Q. And to whom do you report?
  - 4 A. Andrew Howard.
- 02:52:51 5 Q. And you are not aware of any instances of
  - 6 third parties obtaining Facebook's user IDs; is
  - 7 that right?
  - 8 MR. BENJAMIN: Objection to form. Asked
  - 9 and answered and to scope.
- 02:53:06 10 THE DEPONENT: I -- I do not cover
  - 11 scrapping. It is -- and I don't know of instances
  - 12 that I could speak to here or in really any
  - 13 capacity about whether this -- whether there has
  - 14 been scraping of UID.

- 02:53:20 15 Q. (By Ms. Weaver) Is there anyone on the
  - 16 policy team for advertising who is in charge of
  - 17 ensuring that advertising is not permitted by users
  - 18 who are in the possession of Facebook's user IDs?
  - 19 A. Again I'm -- I'm missing the connection
- 02:53:40 20 here between the possession of UIDs and whether
  - 21 someone tiff advertises.
  - Q. Okay. Let's say Amazon has enough data
  - 23 and information to be able to engineer or comes
  - 24 into the possession of Facebook users IDs. And
- 02:54:00 25 Amazon runs campaigns, millions of themselves with

- 02:54:04 1 the -- with the bear minor 20 or 100 people to
  - 2 learn information about users.
  - 3 Does Facebook have any enforcement
  - 4 mechanism to preventive versions who Facebook knows
- 02:54:17 5 or has reason to believe has Facebook user IDs from
  - 6 running that kind of campaign?
  - 7 MR. BENJAMIN: Yeah. Objection to form
  - 8 and scope.
  - 9 THE DEPONENT: Our protections are that
- 02:54:36 10 we don't provide information to the advertiser when
  - 11 they -- on the performance of their ad or who has

- 12 seen their ad for it to be identified able back to
- 13 a user ID.
- 14 Q. (By Ms. Weaver) Is that the only
- 02:54:49 15 protection that Facebook itself does not provide
  - 16 it?
  - 17 A. In addition to the protections of our
  - 18 audience minimum sizes and our policies in term
  - 19 that disallow different use.
- 02:55:09 20 Q. Yes. The many protection that Facebook
  - 21 engages in to ensure that third parties who are
  - 22 conducting targeted advertising with the minimum
  - 23 threshold for which much of the period was 20
  - 24 people, was that Facebook itself did not provide
- 02:55:24 25 the Facebook user ID to the advertiser, correct?

- 02:55:29 1 A. No.
  - 2 MR. BENJAMIN: Objection -- yeah
  - 3 objection to form. Misstates.
  - 4 THE DEPONENT: No our audience minimums
- 02:55:36 5 are a form of protection our aggregated metric are
  - 6 a form of protection.
  - 7 Our policies and our -- and the terms
  - 8 that advertisers have to agree with are a form of

- 9 protection and, again, this is not where I'm an
- 02:55:50 10 expert in, but the efforts we go also on the
  - 11 scraping front and protection there, are additional
  - 12 areas that we ensure this doesn't happen.
  - Q. (By Ms. Weaver) So the efforts to
  - 14 prevent future scrapping doesn't address paths
- 02:56:06 15 scrapping, correct?
  - 16 MR. BENJAMIN: Objection to form and
  - 17 scope. CHECK/CHECK.
  - 18 THE DEPONENT: If someone has a UID
  - 19 our -- our preventing future scrapping does not
- 02:56:21 20 remove that UID from them.
  - Q. (By Ms. Weaver) And when you talk about
  - 22 the terms you mean that the third parties promise
  - 23 that they will not -- well I don't know what you
  - 24 mean. In terms of the terms what do you mean in
- 02:56:32 25 terms of the providing protection to users whose

- 02:56:36 1 Facebook IDs have been taken by advertiser who
  - 2 Facebook then allows to advertisers on their
  - 3 platform in group as small as 20 for the majority
  - 4 of the class period?
- 02:56:50 5 MR. BENJAMIN: Objection to form.

- 6 THE DEPONENT: I think I have to clarify
- 7 a question here. Is there an assumption that the
- 8 UID is specifically being used for the audience?
- 9 Q. (By Ms. Weaver) I -- I don't think
- 02:57:04 10 there's an assumption there.
  - 11 A. Again we have the audience size minimum
  - 12 and we only -- only age gender metaethics this help
  - 13 ensure that we do not provide identifiable
  - 14 information about whose see an ad to the advertiser
- 02:57:29 15 regardless of any other information they have.
  - 16 Q. You referenced terms as also another
  - 17 mechanism to prevent re-identification of users,
  - 18 correct?
  - 19 A. Yes.
- 02:57:42 20 Q. What terms are you referring to?
  - 21 A. Our customer list policies and our
  - 22 advertising terms or advertising guidelines.
  - Q. Are the -- those enforcement mechanisms
  - 24 or are they just agreements?
- 02:58:04 25 A. Those are agreements those set -- those

- 02:58:06 1 are the policies for -- for running ads on our
  - 2 platform.

- Q. Are you aware as a member of the
- 4 advertising policy team of ten people of Facebook
- 02:58:16 5 telling advertisers that they may not tiff on
  - 6 Facebook because they have violated the terms that
  - 7 you are referring to because they possess Facebook
  - 8 user IDs?
  - 9 MR. BENJAMIN: Objection to form.
- 02:58:35 10 THE DEPONENT: I'm not aware of an
  - 11 advertiser breaking the policy here. And -- and.
  - 12 Q. (By Ms. Weaver) Are you aware of any --
  - 13 any enforcement actions taken by Facebook to
  - 14 determine if that had happened?
- 02:58:56 15 MR. BENJAMIN: Objection. Asked and
  - 16 answered.
  - 17 THE DEPONENT: I'm not aware of -- of us
  - 18 being -- of there being a case where this -- like
  - 19 where an advertiser did this that we enforced on or
- 02:59:12 20 that we had to enforce on. I had -- I'm not aware
  - 21 of cases where there's been a violation.
  - Q. (By Ms. Weaver) What steps has Facebook
  - 23 taken to prevent re-identification of users
  - 24 targeted in advertising?
- 02:59:35 25 MR. BENJAMIN: Objection to form. Asked

- 02:59:36 1 and answered.
  - THE DEPONENT: We require an audience
  - 3 minimum. We only provide aggregated metrics to
  - 4 identifiers and we don't tell them who specifically
- 02:59:48 5 saw their ad.
  - 6 Q. (By Ms. Weaver) And is that the entirety
  - 7 of the steps that Facebook has taken to prevent
  - 8 re-identification of users targeted in Facebook's
  - 9 advertising?
- 02:59:59 10 A. Those are the foundation of how our
  - 11 system is built to prevent exactly that.
  - 12 Q. Are there any other steps that Facebook
  - 13 has taken to prevent re-identification of users
  - 14 targeted in Facebook's advertising?
- 03:00:16 15 A. We have built our system specifically to
  - 16 prevent it. I'm not aware of other steps we have
  - 17 had to take.
  - 18 Q. Okay. Thank you.
  - 19 MS. WEAVER: How long have we been going?
- 03:00:35 20 THE VIDEOGRAPHER: Okay. Let me --
  - 21 MS. WEAVER: Let's go off the record.
  - THE VIDEOGRAPHER: Okay. Thanks. We are
  - 23 off the record it's 3:00 o'clock p.m.
  - 24 (Recess taken.)

03:16:44 25 THE VIDEOGRAPHER: Okay. We are back on

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- 03:16:45 1 the record it's 3:16 p.m.
  - Q. (By Ms. Weaver) Ms. Leone I would like
  - 3 to direct your attention to what is being mark
  - 4 right now as exhibit?
- 03:17:15 5 THE COURT REPORTER: 660.
  - 6 MS. WEAVER: 660.
  - 7 (Exhibit 660 was marked for
  - 8 identification by the court reporter and is
  - 9 attached hereto.)
- 03:17:26 10 MS. WEAVER: For the record Bates
  - 11 No. FB-CA-MDL-03969858 through -862.
  - 12 THE DEPONENT: I ever it up.
  - 13 Q. (By Ms. Weaver) Great. And what is
  - 14 Exhibit 670 [sic]?
- 03:17:50 15 MR. BENJAMIN: 660.
  - MS. WEAVER: Sorry.
  - 17 THE DEPONENT: Exhibit 660 is a help
  - 18 center earlier published that we put in our help
  - 19 center for advertisers called used detail
- 03:18:06 20 targeting.
  - Q. (By Ms. Weaver) And it's true an

- 22 accurate, right?
- 23 A. I'm going to read through it. One
- 24 second.
- 03:18:16 25 Q. Okay.

- 03:18:40 1 A. Yes, I read through it and yes it's
  - 2 accurate.
  - Q. Okay. And this document is a current
  - 4 document; is that right as of June 7th, 2022?
- 03:18:58 5 A. Sorry do you mean that this is currently
  - 6 in our help center.
  - 7 0. Yes.
  - 8 A. I believe so, yes. Yes.
  - 9 Q. Okay. And it says use detailed
- 03:19:10 10 targeting.
  - 11 Do you see that?
  - 12 A. Yes.
  - 13 Q. And this is in the help center for
  - 14 advertisers; is that right?
- 03:19:19 15 A. It's in what we call the business help
  - 16 center, which is meant for active audience but it's
  - 17 open to anyone -- anyone can navigate to this.
  - 18 Q. So is this describing interest targeting

- 19 in the detailed targeting that we described at the
- 03:19:41 20 outset of the lit, I mean?
  - 21 A. Yes.
  - 22 Q. Sorry.
  - 23 A. Yes, this is -- this is describing how to
  - 24 use detailed targeting, which is the category
- 03:19:55 25 for -- for audiences to select their parameters,

- 03:19:59 1 which includes interest.
  - Q. And so it says on the first page, that
  - 3 you select your audience preferences by location,
  - 4 age, gender and language and then by detailed
- 03:20:11 5 targeting, correct?
  - 6 A. Yes.
  - 7 Q. So are you required to identify age and,
  - 8 again, derivative and language as a preliminary
  - 9 threshold?
- 03:20:25 10 A. All of our ads have to have a setting for
  - 11 those, but you can have broad setting so it's all
  - 12 captures all ranges so as an example we need to
  - 13 have an age range for that ad but that range range
  - 14 would be the full range rank of people of Facebook
- 03:20:42 15 so 13 to 65 plus. Similar for gender. We have to

- 16 have a setting for it but it could just be all. So
- 17 it is -- it is something that is a toggle but
- 18 the -- it doesn't mean you have to have a specific
- 19 something -- something within those.
- 03:21:01 20 Q. And -- and then what about language.
  - 21 Do you have to select a language?
  - 22 A. No, similar it can be all.
  - Q. Is more expensive if it's all?
  - A. No, that wouldn't be -- it's not going to
- 03:21:23 25 be a one to one if you switch out to be more

- 03:21:27 1 expensive.
  - Q. Right.
  - 3 A. I'm not sure what you mean, sorry.
  - 4 Q. That's -- that's not a good question.
- 03:21:33 5 What I mean how many people speak all languages
  - 6 this is your target audience right?
  - 7 A. It -- it doesn't mean that someone has to
  - 8 speak all languages. It means that any language
  - 9 and perhaps the actual option is called any. It
- 03:21:46 10 means that the audience can be any language.
  - 11 Q. I see. Okay. And does Facebook find
  - 12 that targeting by language allows inferences of

- 13 ethnicity?
- MR. BENJAMIN: Objection to form.
- 03:22:11 15 THE DEPONENT: No. Language is based on
  - 16 the -- the -- the settings people have like how
  - 17 they set up their Facebook and the language they
  - 18 have chosen. That's not something that is -- it is
  - 19 not a method of -- of targeting ethics tee.
- 03:22:34 20 Q. (By Ms. Weaver) Now has Facebook found
  - 21 that people were in permissively tar get by gender
  - 22 for ethics tee using its advertising platform?
  - 23 MR. BENJAMIN: Objection to form. Vague.
  - 24 THE DEPONENT: Sorry, can you walk
- 03:22:50 25 through what mean by imper missively.

- 03:22:55 1 Q. (By Ms. Weaver) Illegally.
  - 2 MR. BENJAMIN: Objection to form and
  - 3 calls for a legal conclusion.
  - 4 THE DEPONENT: Yeah, I can speak to
- 03:23:10 5 something if was illegal. I can -- I can share if
  - 6 there's an example that you have thinking of how
  - 7 those were misused.
  - 8 Q. (By Ms. Weaver) As sit here today are
  - 9 you aware of any such examples?

- 03:23:23 10 MR. BENJAMIN: Objection to form.
  - 11 THE DEPONENT: Specifically for -- for I
  - 12 am sorry you mentioned did you say for gender.
  - 13 Q. (By Ms. Weaver) Uh-huh.
  - 14 A. No, not aware of a case where it was
- 03:23:40 15 misused. But it's worth noting that we don't
  - 16 permit again integer targeting for specific types
  - 17 of ads to help specifically to prevent misuse. We
  - 18 limit that and advertiser who are running housing
  - 19 employment and credit ads cannot use gender
- 03:23:57 20 targeting they must maintain at all they cannot
  - 21 select specific genders that's to prevent for
  - 22 misuse.
  - Q. And how long has been the days?
  - A. That's a policy we had in place since
- 03:24:08 25 2018.

- 03:24:09 1 Q. And was that a result of litigation?
  - 2 MR. BENJAMIN: Objection to form and to
  - B the extent you can answer without disclosing
  - 4 privileged information or communications you can do
- 03:24:24 5 so.
  - 6 THE DEPONENT: I -- I need a quick break?

- 7 MS. WEAVER: Okay.
- 8 THE DEPONENT: To discuss with Matt on AC
- 9 privacy expectations.
- 03:24:37 10 THE VIDEOGRAPHER: Okay go off the record
  - 11 everybody.
  - MS. WEAVER: Yeah, that's fine.
  - 13 MR. BENJAMIN: That's fine individual
  - 14 okay we are off the record it's 3:24 p.m.
- 03:24:51 15 (Recess taken.)
  - 16 THE VIDEOGRAPHER: We are back on the
  - 17 record it's 3:34 p.m.
  - 18 Q. (By Ms. Weaver) There was a question
  - 19 pending when you we took to break to consult with
- 03:34:28 20 your counsel.
  - 21 Can you answer the question now?
  - 22 A. Do you mind repeating it.
  - 23 Q. Sure.
  - I think the question was was that a
- 03:34:35 25 result of litigation?

- 03:34:38 1 A. We were discussing the -- the midst for
  - 2 age ore gender targeting or housing employment and
  - 3 credit ads. We always -- have -- have a

- 4 longstanding policy that disallows discrimination
- 03:34:52 5 including through our targeting tools in 2019 I
  - 6 should correct my previous answer. We launched
  - 7 specifically the targeting limitations for those
  - 8 ads and what we call -- the special ad categories.
  - 9 For -- as part of a settlement with litigation.
- - 11 A. It -- I actually don't know all the
  - 12 parties involved in that litigation. So I might
  - 13 need to -- to refresh on that.
  - 14 Q. And prior to that litigation and
- 03:35:27 15 settlement, Facebook did not have a policy that
  - 16 disallowed discrimination through the use of
  - 17 targeting tools?
  - 18 A. No, sorry. To clarify we -- that's what
  - 19 I was saying we had a longstanding policy on --
- 03:35:42 20 that disallows discrimination. In 2019 as part of
  - 21 our settlement with this litigation, we built the
  - 22 special ad category that disallowed gender
  - 23 selection among or housing employment and credit ad
  - 24 reporting and that was from conversations concerned
- 03:35:59 25 about the potential for misuse of those.

- 03:36:02 1 Q. And does that same tool also prevent
  - 2 targeting based on race, sexual orientation,
  - 3 disability and religion?
  - 4 A. We don't provide those targeting options
- 03:36:16 5 at all to any advertiser.
  - 6 Q. But was it a probably nonetheless that
  - 7 Facebook's targeted advertising involved
  - 8 discrimination against people in those categories?
  - 9 MR. BENJAMIN: Objection.
- 03:36:31 10 Q. (By Ms. Weaver) At any point during the
  - 11 class period?
  - 12 MR. BENJAMIN: I am sorry I thought your
  - 13 question was over.
  - 14 Objection to form. Misstates?
- 03:36:40 15 THE DEPONENT: We don't offer those
  - 16 targeting gassed on those. And so it -- it wasn't
  - 17 relevant to the -- the -- how we built our special
  - 18 ad category, which -- which restricted targeting
  - 19 that we do offer.
- 03:36:56 20 Q. (By Ms. Weaver) So is it your testimony
  - 21 that at no point did Facebook's advertising give
  - 22 third party advertiser the ability to exclude
  - 23 ethnic and religion, minority immigrants LGBTO and
  - 24 other protect groups from seeing their ads
- 03:37:16 25 CHECK/CHECK?

- 03:37:18 1 MR. BENJAMIN: Objection to form.
  - THE DEPONENT: We don't offer targeting
  - 3 based on -- I am sorry race or ethnicity or
  - 4 religious views and their -- therefore there wasn't
- 03:37:31 5 an able to exclude those.
  - 6 Q. (By Ms. Weaver) Okay.
  - 7 A. Based on that.
  - 8 MS. WEAVER: Let's look at Exhibit 661.
  - 9 (Exhibit 661 was marked for
- 03:37:39 10 identification by the court reporter and is
  - 11 attached hereto.)
  - 12 MS. WEAVER: And for the record it's an
  - 13 announcement from the Washington state office of
  - 14 the attorney general the title AG Ferguson leads to
- 03:37:51 15 Facebook nationwide changes to prohibit
  - 16 discriminatory advertisements on its platform.
  - 17 It is dated July 24th, 2018 and the first
  - 18 paragraph "attorney Bob Ferguson announced that
  - 19 Facebook signed a legally finding agreement with
- 03:38:10 20 this office to make significant changes to its
  - 21 advertising platform by removing the ability of
  - 22 third party advertisers to exclude ethnic and

- 23 religious Monday error tee immigrants, LBGQT
- 24 individuals and other protected groups from seeing

03:38:26 25 their ads."

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- 03:38:26 1 Do you see that?
  - THE DEPONENT: I do.
  - 3 MR. BENJAMIN: Sorry objection to form
  - 4 counsel would provide that was document 72 hours
- 03:38:35 5 before the deposition.
  - 6 MS. WEAVER: I don't believe so. It's in
  - 7 the public domain.
  - 8 MR. BENJAMIN: So your position it didn't
  - 9 need to be identified 72 hours before.
- 03:38:43 10 MS. WEAVER: Yes.
  - 11 Q. (By Ms. Weaver) Ms. Leone, do you see
  - 12 that first paragraph?
  - 13 A. I do.
  - 14 Q. That I just read into the rope?
- 03:39:02 15 A. I do.
  - 16 Q. Is it your testimony that that is untrue?
  - 17 A. We did not provide the ability for
  - 18 advertisers to include or include on the basis of
  - 19 their ethnic religious, immigration status, so this

- 03:39:17 20 is -- this misrepresents the options that were
  - 21 available.
  - Q. I don't think it's making any
  - 23 representation about the options that are
  - 24 available. What it is saying is that in fact
- 03:39:31 25 Facebook signed an agreement so that third party

- 03:39:35 1 advertisers could not discriminate against those
  - 2 parties, right that's true you are not disputing
  - 3 that?
  - 4 MR. BENJAMIN: Objection to form.
- 03:39:44 5 Argumentative miss mischaracterizes.
  - 6 THE DEPONENT: We built a -- what is
  - 7 called the special ad category with restricted
  - 8 targeting options for housing employment and credit
  - 9 ads. It wasn't that the previous options in any --
- 03:40:04 10 like were enabling specifically targeting or
  - 11 exclusion on these protected characteristics.
  - 12 Because as an example we don't have people's race
  - 13 or ethics fee.
  - 14 Q. (By Ms. Weaver) Is it your testimony
- 03:40:17 15 today that there was not an ethnic after finite tee
  - 16 targeting option at Facebook ever?

- 17 A. We had ethics after finite tee clusters
- 18 those not based on race data or someone's race or
- 19 ethics tee.
- 03:40:32 20 Q. Okay. Is it your testimony that in fact
  - 21 individuals in these protected categories were not
  - 22 discriminated against through advertising and
  - 23 Facebook's website?
  - 24 MR. BENJAMIN: Objection to form. Calls
- 03:40:48 25 for a legal conclusion and scope.

- 03:40:52 1 THE DEPONENT: We didn't identify misuse
  - 2 here and we wouldn't necessarily be able to
  - 3 identify a discriminator use as an example. You
  - 4 could run one ad that specific targeting to women.
- 03:41:06 5 You would then run another ad for men and overall
  - 6 your campaign may or may not be problematic.
  - 7 Similar off of Facebook you could run an ad on
  - 8 Google for a specific group and Facebook for
  - 9 another.
- 03:41:20 10 It -- there wasn't a specific case
  - 11 here -- a -- a specific misuse that was being dealt
  - 12 with. It was a potential that he then we corrected
  - 13 we built this special ad category functionality

- 14 for.
- - 16 have targeted categories for ethnic affinities
  - 17 African American US, Asian American US Hispanic US
  - 18 all Hispanic US bilingual Hispanic US Spanish
  - 19 bilingual and Hispanic US document CHECK/CHECK?
- 03:42:00 20 MR. BENJAMIN: Objection to form to form.
  - 21 Compound and scope.
  - 22 THE DEPONENT: Those were categories we
  - 23 offered as targeting up until 2020.
  - Q. (By Ms. Weaver) And when did they
- 03:42:17 25 commence?

- 03:42:21 1 MR. BENJAMIN: Same objection.
  - THE DEPONENT: I'm not sure of the exact
  - 3 year but between 2012 and 2014.
  - 4 Q. (By Ms. Weaver) And why did Facebook
- 03:42:42 5 discontinue it in 2020 of those categories?
  - 6 A. We --
  - 7 MR. BENJAMIN: Same objections.
  - 8 THE DEPONENT: We consistently look at
  - 9 the targeting we offer and whether it's being used,
- 03:42:52 10 whether it -- it is still relevant if there's

- 11 duplicative options and in 2020 we under went
- 12 several updates across all of or targeting and
- 13 those were deprecated as part of a simplification
- 14 effort.
- 03:43:19 15 Q. (By Ms. Weaver) Are you aware of whether
  - 16 or not in 2018 Facebook agreed to take steps to
  - 17 prevent third party advertisers from excluding
  - 18 persons -- from receiving advertisements for
  - 19 employment, housing, credit insurance and places of
- 03:43:33 20 public accommodation to the extent it effected the
  - 21 citizens of Washington?
  - 22 MR. BENJAMIN: Objection to form and
  - 23 scope.
  - 24 THE DEPONENT: I am sorry I missed the
- 03:43:45 25 beginning of the question. It was whether we took

- 03:43:48 1 steps to prevent exclusion for these ads?
  - 2 O. (By Ms. Weaver) Whether Facebook agreed
  - 3 in 2018 with the state of wash top to take
  - 4 exception to prevent third party advertisers from
- 03:44:00 5 receiving advertisement for employment housing
  - 6 credit insurance and places in public accommodation
  - 7 to the extent it discriminated against people under

- 8 those protected categories who lived in the state
- 9 of Washington?
- 03:44:15 10 MR. BENJAMIN: Objection to form and
  - 11 scope.
  - 12 THE DEPONENT: I'm not -- I think I
  - 13 misunderstanding the question because it has
  - 14 exclusion and seeing an ad. But in -- in 2018, is
- 03:44:28 15 when we agreed to build the category -- the housing
  - 16 employment and credit restrictions the flow for
  - 17 those ads, that limits the targeting options that
  - 18 they have.
  - 19 Q. (By Ms. Weaver) So Facebook agreed to do
- 03:44:41 20 it in 2018 but it didn't happen until 2020; is that
  - 21 right?
  - 22 A. No.
  - 23 MR. BENJAMIN: Objection.
  - Q. (By Ms. Weaver) Please clarify?
- 03:44:52 25 A. In 2020, we deprecated specifically among

- 03:44:57 1 other -- other targeting options for all
  - 2 advertisers the multi-culture after finite tee
  - 3 options. Separately, we launched in 2019 the
  - 4 special ad create flow which -- which was the

- 03:45:14 5 restricted flow for housing employment and credit
  - 6 advertisers.
  - 7 Q. What are?
  - 8 A. Those are distip.
  - 9 Q. What about in size?
- 03:45:24 10 A. Insurance.
  - 11 Q. Was that --
  - 12 A. Insurance is not include with -- with
  - 13 the -- with the note if -- if it is housing
  - 14 insurance or related mortgage insurance those are
- 03:45:38 15 included.
  - 16 Q. Okay. Just for the record, in 2019 --
  - 17 when Facebook launched the special ad create flow
  - 18 to restrict the flow, you are saying it was only
  - 19 for housing employment and credit advertisers; is
- 03:45:54 20 that correct?
  - 21 A. Yes.
  - Q. What about insurance or places of public
  - 23 accommodation?
  - 24 MR. BENJAMIN: Objection to form.
- 03:46:06 25 Q. (By Ms. Weaver) Could I just finish the

- 2 MR. BENJAMIN: I and sorry I thought you
- 3 were done.
- 4 MS. WEAVER: That's fine.
- 03:46:11 5 Q. (By Ms. Weaver) So what about insurance
  - 6 or places of public accommodation, did Facebook
  - 7 restrict the flow for -- for advertisement relating
  - 8 to that as well in 2019?
  - 9 MR. BENJAMIN: Objection to form and
- 03:46:24 10 scope.
  - 11 THE DEPONENT: No.
  - 12 O. (By Ms. Weaver) Did Facebook for the
  - 13 flow that Facebook created did it only apply to the
  - 14 citizens of Washington did it apply to all citizens
- 03:46:38 15 in the United States?
  - 16 A. It applies to all ads bought by an
  - 17 advertiser based in the US where -- and any ad
  - 18 where the audience includes the US as well as now
  - 19 we have launched it in Canada and Europe.
- 03:47:01 20 Q. And with regard to the ethnic after
  - 21 finite tee group deprecation, can you identify
  - 22 which ethnic affinity group deprecations you are
  - 23 reappearing to, which groups?
  - 24 MR. BENJAMIN: Objection to form.
- 03:47:17 25 THE DEPONENT: The -- the names of the

- 03:47:19 1 targeting options?
  - Q. (By Ms. Weaver) Yes.
  - 3 A. We deprecated African American US these
  - 4 are multicultural affinity options that were
- 03:47:34 5 labeled and what -- that I'm listing. African
  - 6 American, Hispanic bilingual Hispanic Spanish
  - 7 Hispanic English an Asian American.
  - 8 Q. Anything else.
  - 9 A. No unless I'm missing one I believe they
- 03:48:01 10 were five. We deprecated all of multi-culture
  - 11 affinities in 2022.
  - 12 Q. Did Facebook perform an economic analysis
  - 13 of the impact of deprecating those affinity groups
  - 14 as targets?
- 03:48:15 15 MR. BENJAMIN: Objection to form and
  - 16 scope.
  - 17 THE DEPONENT: Similar to to earlier
  - 18 there isn't a -- an economic or revenue analysis
  - 19 associated with individual targeting options.
- 03:48:33 20 Q. (By Ms. Weaver) I understand that I'm
  - 21 just saying it's a pretty big deprecation to
  - 22 deprecate these kind of targeting group there no
  - 23 certainly analysis at Facebook of how it might

24 effect revenue to deprecate those products; is that 03:48:47 25 what you are saying?

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- 03:48:49 1 MR. BENJAMIN: Objection to form and
  - 2 scope.
  - 3 THE DEPONENT: We don't measure --
  - 4 measure by a -- by targeting option basis and so
- 03:48:57 5 it's -- it's not how we assess a targeting option
  - 6 or revenue.
  - 7 Q. (By Ms. Weaver) Okay. How about a cost
  - 8 benefit analysis. Are you aware -- are you aware
  - 9 of external analysis at Facebook whether it good
- 03:49:13 10 idea or not to deprecate multicultural affinity and
  - 11 the Ime impact it might have on Facebook?
  - MR. BENJAMIN: Objection to form and
  - 13 scope.
  - 14 THE DEPONENT: In -- making -- in
- 03:49:25 15 assessing whether to -- to maintain or remove
  - 16 those, we look at their use. We look rat an
  - 17 understanding of who -- beneficial uses of those.
  - 18 As an example and so that was definitely part of
  - 19 the consideration. But it is not in the form of a
- 03:49:45 20 revenue number.

- Q. (By Ms. Weaver) Okay. So there were
- 22 internal analyses that were considering whether or
- 23 not to deprecate the multi multicultural affinity
- 24 groups; is that right?
- 03:50:00 25 MR. BENJAMIN: Objection to form

- 03:50:01 1 misstates and scope.
  - 2 THE DEPONENT: It was an internal
  - 3 conversation from the ads product team their policy
  - 4 and legal counterparts on -- on those options the
- 03:50:13 5 same way that we would have discussed any other
  - 6 option in fact the deprecation that they were part
  - 7 of was a broader deprecation.
  - 8 Q. (By Ms. Weaver) What was the broader
  - 9 deprecation that they were part of?
- 03:50:25 10 A. We simplified our targeting options in
  - 11 August 2020 it included removing duplicative
  - 12 options. Options that were unclear that
  - 13 advertisers didn't understand and this was part of
  - 14 that effort.
- - 16 the internal discussions regarding whether or not
  - 17 to deprecate the multicultural affinity groups?

- 18 A. Our ad targeting team was involved. Ads
- 19 leadership was involved.
- 03:50:56 20 Q. And who by name?
  - 21 A. I'm -- sorry I'm trying to remember
  - 22 specifically who was the ads lead at the time.
  - 23 This would have been within ads product Dan Levy
  - 24 was likely involved but I can't remember who else
- 03:51:45 25 on his team.

- 03:51:47 1 Q. And did violate Facebook's policy for
  - 2 multicultural affinity group targeting to
  - 3 discriminate against people who were put in those
  - 4 target groups with respect to advertising involving
- 03:52:05 5 housing and employment, for example?
  - 6 MR. BENJAMIN: Objection to form.
  - 7 THE DEPONENT: So we disallowed
  - 8 discriminatory use of our tools regardless of any
  - 9 specific option that's -- that's not something we
- 03:52:24 10 permit.
  - In -- in 2018, we disallowed the use of
  - 12 those multicultural affinity targets -- options
  - 13 with housing employment and credit ads and in 2019
  - 14 we created a specific flow so that they couldn't be

- 03:52:40 15 selected with those ads at all.
  - 16 Q. (By Ms. Weaver) And I'm just trying to
  - 17 say, so in Facebook's view, was that an abuse of
  - 18 Facebook's advertising platform for advertisers to
  - 19 engage in programs that discriminated against
- 03:52:57 20 person's in those policy enforcement protected
  - 21 categories from receiving advertisement for
  - 22 employment, housing and credit?
  - 23 MR. BENJAMIN: Objection to form.
  - 24 THE DEPONENT: Discriminatory uses
- 03:53:13 25 against our policies. The use of these segments

- 03:53:15 1 was not discriminatory that wasn't our conclusion
  - 2 or estimate. As part of efforts to pro vent
  - 3 misuse, we disallowed them being use with housing
  - 4 an employment and credit ads and, again, to clarify
- 03:53:29 5 those segments are not representative or -- those
  - 6 are not based on our representative of people's
  - 7 race or ethnicity.
  - 8 Q. (By Ms. Weaver) What are the data inputs
  - 9 to determine multicultural affinity groups that was
- 03:53:45 10 the targeting categories that Facebook created?
  - 11 A. Those are based on info people have

- 12 provided us as well as their activity on Facebook.
- 13 Q. And what specific activity caused
- 14 Facebook to put somebody in one of these
- 03:54:04 15 multicultural affinity groups?
  - 16 A. People's engagement with pages
  - 17 co-associate them with one of these.
  - 18 Q. Can you give me a specific example of a
  - 19 kind of engagement that would put a person in an
- 03:54:17 20 African American affinity group?
  - 21 A. If you engage with a page -- a cultural
  - 22 page related to African American culture and like
  - 23 that page you follow this could be a group you
  - 24 could be in this target option.
- 03:54:33 25 Q. What is a cultural page related to

- 03:54:36 1 African American culture?
  - 2 MR. BENJAMIN: Objection to form.
  - 3 THE DEPONENT: I don't know the exact
  - 4 list of pages. But an example could be black lives
- 03:54:47 5 matter.
  - 6 Q. (By Ms. Weaver) This was of course
  - 7 before BLM, right?
  - 8 MR. BENJAMIN: Objection to form.

- 9 Q. Can you give me an example of cultural
- 03:55:01 10 page related to African American culture that was
  - 11 actually used to determine whether or not somebody
  - 12 was in an African American affinity group?
  - 13 A. I think --
  - 14 MR. BENJAMIN: Objection to form and --
- 03:55:14 15 and scope.
  - 16 THE DEPONENT: I don't have the list of
  - 17 pages specifically that were used that wasn't an
  - 18 illustrative example. I can think of another one
  - 19 if that's useful. But it's meant to -- to indicate
- 03:55:30 20 the type of page and you -- there's similar ones
  - 21 for Hispanic culture you could look cuisine pages
  - 22 to Hispanic cuisine would have been used as well.
  - Q. What does Hispanic mean in this context
  - 24 of Facebook's multicultural affinity group?
- 03:55:55 25 MR. BENJAMIN: Objection to form and

- 03:55:55 1 scope.
  - THE DEPONENT: It's simply the -- the how
  - 3 the naming of the page or -- of the common topics
  - 4 that people were engaging with.
- 03:56:08 5 Q. (By Ms. Weaver) In Facebook's view what

- 6 is Hispanic mean when it created this multicultural
- 7 affinity group?
- 8 MR. BENJAMIN: Objection to form and
- 9 scope.
- 03:56:19 10 THE DEPONENT: I don't think that we have
  - 11 a -- a Facebook definition of Hispanic. This was
  - 12 meant to indicate that these are -- this targeting
  - 13 option was meant to indicate that people have
  - 14 engaged with Hispanic on Facebook so that would be
- 03:56:36 15 API cultural page there would be language in span
  - 16 addition there are -- are a number of reasons and
  - 17 ways that someone can be part of this based on the
  - 18 info they provided and the activity on their
  - 19 platform.
- 03:56:49 20 Q. (By Ms. Weaver) What does Hispanic
  - 21 culture mean in Facebook's view?
  - 22 MR. BENJAMIN: Objection. Asked and
  - 23 answered and scope.
  - 24 THE DEPONENT: Again we don't have define
- 03:57:04 25 Hispanic culture I don't think we have a specific

- 03:57:06 1 definition for that.
  - Q. (By Ms. Weaver) You must have some

- 3 definition because based on specific kinds of
- 4 activity you decided that people were in and
- 03:57:17 5 Hispanic multicultural group so I guess I'm just
  - 6 wondering what the parameters were that Facebook
  - 7 used to decide that something was and Hispanic
  - 8 activity?
  - 9 MR. BENJAMIN: Objection to form and
- 03:57:30 10 scope.
  - 11 THE DEPONENT: To -- we weren't defining
  - 12 if somebody is a Hispanic activity. We were
  - 13 looking at the -- the topics people engage with and
  - 14 if those topics relate to Hispanic culture so that
- 03:57:46 15 could be things like speaking Spanish. It could be
  - 16 like Hispanic cuisine it could be Spanish speaking
  - 17 telenovelas. These are things that also the pages
  - 18 themselves identify as part of this culture. And
  - 19 the people who engage with them were then included
- 03:58:04 20 in this targeting option.
  - 21 O. (By Ms. Weaver) Does Facebook have a
  - 22 list of the activities that it seemed sufficient to
  - 23 trigger inclusion in each of these ethnic
  - 24 multicultural affinity groups?
- 03:58:19 25 MR. BENJAMIN: Objection.

- 03:58:19 1 THE DEPONENT: Facebook.
  - Q. (By Mr. Benjamin) Objection to form?
  - 3 THE DEPONENT: One action is not going to
  - 4 trigger anyone to be part of really any -- of the
- 03:58:31 5 interest or -- or multi-culture affinity options.
  - 6 This is about repeated continuous engagement. So
  - 7 if someone activity over time showed that they were
  - 8 interested in these topics.
  - 9 Q. (By Mr. Benjamin) Okay. You just
- 03:58:46 10 testified "we were looking at the topics people
  - 11 engage with and if those topics relate to Hispanic
  - 12 culture."
  - Do you recall that?
  - 14 A. Yes.
- - 16 that Facebook teamed related to Hispanic culture
  - 17 that were used then communication tally or
  - 18 individually to determine that somebody was a
  - 19 multicultural affinity group?
- 03:59:13 20 MR. BENJAMIN: Objection to form and
  - 21 scope.
  - 22 THE DEPONENT: This might just be the
  - 23 wording here, but it is when pages are -- as an
  - 24 example when pages are about specific topics, they

03:59:25 25 can -- those would relate to Hispanic culture and

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- 03:59:29 1 if people consistently engage they would then be
  - 2 part of this segment.
  - Q. (By Ms. Weaver) I many adjust trying to
  - 4 hundred a list of description of which pages and
- 03:59:43 5 topics Facebook decided were triggers to include
  - 6 specific people and in multicultural affinity
  - 7 groups?
  - 8 MR. BENJAMIN: Objection to form and
  - 9 scope.
- 04:00:02 10 THE DEPONENT: It's pages that relate to
  - 11 this, so that could be based on a pages description
  - 12 saying they are related to his Hispanic culture as
  - 13 an example.
  - 14 Q. (By Ms. Weaver) Okay. So does Facebook
- 04:00:14 15 have a list as an example, of just the pages that
  - 16 Facebook deemed related to multicultural affinity
  - 17 of the categories that were deprecated in 2020?
  - 18 A. Those categories were deprecated in 2020
  - 19 and I believe we don't maintain that once a
- 04:00:34 20 category is deprecated.
  - Q. Are you aware and you are not aware

- 22 whether or not there was a litigation hold or
- 23 requirement as a result of litigation that Facebook
- 24 Maine taken those categories?
- 04:00:52 25 MR. BENJAMIN: Objection. Sorry

- 04:00:53 1 objection to form and scope and to the extent it
  - 2 calls for legal analysis or conclusion.
  - 3 Also caution Ms. Leone to carve out of
  - 4 your answer, any privileged information or
- 04:01:05 5 communications.
  - 6 THE DEPONENT: I'm not certain on -- if
  - 7 it was under a legal hold or not and I'm also not
  - 8 certain if we have it or not given that these were
  - 9 deprecated.
- 04:01:17 10 Q. (By Ms. Weaver) So is it your
  - 11 understanding that if Facebook determines a product
  - 12 Facebook doesn't maintain any information relating
  - 13 to that deprecated product?
  - 14 MR. BENJAMIN: Objection to form.
- 04:01:29 15 Misstates and scope.
  - 16 THE DEPONENT: No, that's not my
  - 17 understanding. But when we deprecate a product we
  - 18 are not maintaining or it is not continuously

- 19 associating and that's what I meant. It's not
- 04:01:46 20 continuously looking for pages that might be
  - 21 related to that topic. It's shut down.
  - Q. (By Ms. Weaver) So your testimony was
  - 23 "those categories were deprecated in 2020 and I
  - 24 believe we don't maintain that once a category is
- 04:02:09 25 deprecated."

- 04:02:11 1 Do you recall that?
  - 2 A. Yes.
  - Q. And when you say "we don't maintain that"
  - 4 what did you mean?
- 04:02:19 5 A. I mean what I was just describing. Which
  - 6 is that we are not continuously associating
  - 7 engagement into those categories and I don't know
  - 8 to whichever degree under legal hold or otherwise
  - 9 what we maintain historically.
- 04:02:40 10 Q. Now it's your testimony that Facebook has
  - 11 not taken steps to prevent third party advertisers
  - 12 from excluding people from receiving advertisements
  - 13 for insurance or places of public accommodation; is
  - 14 that right, based on these protected check the
- 04:03:02 15 Ethan Beard technical project disable group; is

- 16 that right?
- 17 MR. BENJAMIN: Objection to form.
- 18 Misstates and compound.
- 19 THE DEPONENT: Yeah, there are few parts.
- 04:03:12 20 We don't have targeting options related to
  - 21 protected people's race or ethnicity as a part
  - 22 starting point. That's not what multicultural
  - 23 affinities were. House -- the -- any ad has to
  - 24 abide by our nondiscrimination policy. And we
- 04:03:30 25 don't -- including an insurance ad regardless of

- 04:03:38 1 the -- whether or not their AG their housing
  - 2 employment or credit.
  - Q. (By Ms. Weaver) Okay. Why don't we take
  - 4 a look at Exhibit 662.
- 04:03:52 5 (Exhibit 662 was marked for
  - 6 identification by the court reporter and is
  - 7 attached hereto.)
  - 8 MR. BENJAMIN: And counsel was this is a
  - 9 document that was provided to us.
- 04:04:12 10 MS. WEAVER: No it's public.
  - MR. BENJAMIN: 72 hours.
  - MR. BENJAMIN: Okay. And what paragraph

- 13 of the Special Master protocol are you relying on
- 14 for that exception.
- 04:04:20 15 MS. WEAVER: You have colloquy off the
  - 16 record if you would like?
  - 17 MR. BENJAMIN: Special Master however you
  - 18 prefer happy to discuss outside the presence of the
  - 19 witness.
- 04:04:30 20 SPECIAL MASTER GARRIE: I ask the witness
  - 21 to -- yeah go to break out room we'll stay on the
  - 22 record. What's issues counsel Ben.
  - 23 MR. BENJAMIN: I just want to clarify
  - 24 Special Master the Counsel Weaver's basis for not
- 04:04:57 25 having provided the documents under the spellings

- 04:05:01 1 master protocol 72 hours in advance.
  - 2 SPECIAL MASTER GARRIE: It's public
  - 3 available document.
  - 4 MS. WEAVER: Yes.
- 04:05:09 5 SPECIAL MASTER GARRIE: And I believe
  - 6 that -- well Counsel Weaver would care to explain.
  - 7 MS. WEAVER: Yeah, if we had provide
  - 8 Facebook every public Facebook it would be reams we
  - 9 have talked about the topic. Facebook itself

- 04:05:22 10 identified a ton of policies talking about how
  - 11 people may or may not target people based on gender
  - 12 or age. So you know from my perspective, we
  - 13 outstanding perfectly entitled to discuss with
  - 14 Facebook particularly given the assertions of this
- 04:05:41 15 don't in this deposition, that this kind of
  - 16 targeting did not occur, these are also coming in
  - 17 as impeachment.
  - 18 So look, I can do two ways you can say
  - 19 you don't have discussion these documents right
- 04:05:52 20 now. And then I will file a new notice because
  - 21 it's relevant it's obviously data misuse. And
  - 22 relevant to the case. And we can call the witness
  - 23 back at another time and do this kind of
  - 24 questioning. We were not trying to pull a fast
- 04:06:08 25 one. It didn't occur that we had to provide to

- 04:06:11 1 Facebook, you know, Exhibit 662 is -- is a
  - 2 assurance of discontinuance signed by Facebook so.
  - 3 MR. BENJAMIN: And I all I really all
  - 4 wanted to just to clarify the basis for using and
- 04:06:26 5 document as exhibit in the deposition.
  - 6 MS. WEAVER: Okay.

- 7 MR. BENJAMIN: I am happy.
- 8 SPECIAL MASTER GARRIE: I think -- so
- 9 Counsel Benjamin from impeachment purposes and
- 04:06:35 10 there's your explanation.
  - 11 MR. BENJAMIN: Yeah, I am not sure agree
  - 12 with characterization Special Master I'm happy to.
  - 13 SPECIAL MASTER GARRIE: I'm not -- I'm
  - 14 not -- let's be clear my restatement isn't a
- 04:06:45 15 representation that I agree or disagree that is
  - 16 represent representation -- that is what plaintiffs
  - 17 stated.
  - 18 MR. BENJAMIN: Understood and happy to
  - 19 let questioning on the document proceed on that
- 04:06:56 20 basis. Thank you for clarifying.
  - 21 SPECIAL MASTER GARRIE: Okay. So with
  - 22 that said should we call the witness back.
  - MS. WEAVER: Yes.
  - MR. BENJAMIN: Yes.
- 04:07:08 25 MS. WEAVER: Yes.

- 04:07:09 1 MR. BENJAMIN: I will grab her.
  - 2 SPECIAL MASTER GARRIE: Thank you.
  - 3 John did Counsel Benjamin say we were

- 4 taking a break or is getting the witness?
- 04:09:26 5 THE VIDEOGRAPHER: They were just going
  - 6 to get the witness so we are still on the record.
  - 7 SPECIAL MASTER GARRIE: Okay.
  - 8 MS. WEAVER: Can we go off the record if
  - 9 we are just sitting here in silence.
- 04:10:06 10 SPECIAL MASTER GARRIE: Well I didn't
  - 11 think we would be sitting here in silence, so I
  - 12 agree.
  - MS. WEAVER: Thank you.
  - 14 SPECIAL MASTER GARRIE: Let's go off the
- 04:10:13 15 record.
  - 16 THE VIDEOGRAPHER: Okay we are off the
  - 17 record it's 4:10 p.m.
  - 18 (Recess taken.)
  - 19 THE VIDEOGRAPHER: Okay. We are back on
- 04:12:05 20 record it's 4:12 p.m.
  - Q. (By Ms. Weaver) Ms. Leone have you had a
  - 22 moment to look at Exhibit 662?
  - 23 A. I started to read through I happy's read
  - 24 through but yes, I have.
- 04:12:19 25 Q. Take your time and while you are reading

- 04:12:20 1 through it?
  - 2 MS. WEAVER: Just for the record, exhibit
  - 3 says state of Washington king county superior in re
  - 4 Facebook assurance of discontinuation it's dated
- 04:12:32 5 July 24th, 2018.
  - 6 Q. (By Ms. Weaver) And I will direct your
  - 7 attention to paragraph 3.2?
  - 8 A. I'm there and I have read through most of
  - 9 3.2.
- 04:13:19 10 Q. Okay. But let me ask first were aware of
  - 11 this notice of discontinuance?
  - 12 A. Yes.
  - 13 Q. And -- and how did you become a we have
  - 14 of it?
- 04:13:31 15 A. I was on -- I was part of the team on
  - 16 ads -- on ads at the time.
  - 17 Q. And so were you involved in taking steps
  - 18 to prevent third party advertisers from excluding
  - 19 persons that were the subject of a lawsuit from
- 04:13:52 20 discrimination or from receiving advertisement
  - 21 based on protected characteristics?
  - 22 MR. BENJAMIN: Objection to form and
  - 23 scope.
  - 24 THE DEPONENT: I was involved in updates
- 04:14:06 25 to our platform to be clear, this is -- that was

- 04:14:09 1 distinct from -- that -- that -- these targeted
  - 2 operations weren't discriminatory but I was
  - 3 involved in updating our targeting options.
  - 4 Q. (By Ms. Weaver) Okay. Look at paragraph
- 04:14:21 5 3.2 although Facebook denies these allegations
  - Facebook agrees to take the following steps
  - 7 intended to prevent third party advertisers from
  - 8 excluding person's from receiving advertisement for
  - 9 employment, housing, credit, insurance, and/or
- 04:14:38 10 places of public accommodation based on the
  - 11 protected characteristics to the extent they effect
  - 12 citizens of Washington.
  - Do you see that?
  - 14 A. Yes.
- 04:14:50 15 Q. And you testified that Facebook has taken
  - 16 steps to preventives from excluding persons from
  - 17 employment, housing and credit but not insurance or
  - 18 places of public accommodation; is that true?
  - 19 MR. BENJAMIN: Objection to form.
- 04:15:07 20 Misstates the testimony and scope.
  - 21 THE DEPONENT: There -- two separate --
  - 22 we launched the updates to housing employment and

- 23 credit ad reporting which restricted the targeting
- 24 they -- they could use when running an ad in 2018
- 04:15:23 25 we updated to remove the exclusion capability for

- 04:15:27 1 all ads related -- related to the multicultural
  - 2 affinity segments and other interests and across
  - 3 the board prior to that our policy has always
  - 4 been -- nondiscrimination policy has always been in
- 04:15:42 5 place.
  - 6 Q. (By Ms. Weaver) So there was a policy
  - 7 that said you could not discriminate but prior to
  - 8 that time advertisers could exclude people based on
  - 9 the protected characteristics identified in 662,
- 04:15:56 10 right?
  - 11 A. No. Because our targeting options don't
  - 12 represent those protected characteristic.
  - 13 Q. Did Facebook have a targeting category
  - 14 for wheelchair use users?
- 04:16:16 15 A. There was.
  - 16 MR. BENJAMIN: Objection -- objection to
  - 17 form.
  - 18 THE DEPONENT: There was an interest
  - 19 called wheelchair users it was not based on whether

- 04:16:24 20 or not someone uses a wheelchair.
  - 21 O. (By Ms. Weaver) Was there a targeting
  - 22 characteristics for Chinese people?
  - 23 MR. BENJAMIN: Objection to form.
  - 24 THE DEPONENT: There might have been an
- 04:16:38 25 interest called Chinese people but, again, it was

- 04:16:40 1 not based on whether or not someone has Chinese.
  - Q. (By Ms. Weaver) Was there a targeting
  - 3 characteristics for Chinese literature and
  - 4 disability rights?
- 04:16:55 5 MR. BENJAMIN: Same objection.
  - 6 THE DEPONENT: Yes, both of those seem
  - 7 like they would have been interest as well.
  - 8 Q. (By Ms. Weaver) Do you recall any other
  - 9 targeting characteristics that were addressed in
- 04:17:04 10 this lawsuit related to the multicultural affinity
  - 11 groups?
  - 12 MR. BENJAMIN: Objection to form and
  - 13 scope.
  - 14 THE DEPONENT: These aren't targeting
- 04:17:15 15 characteristics just to be clear these list
  - 16 targeting options is that.

- 17 Q. (By Ms. Weaver) That's fine I will
- 18 restate the question.
- 19 A. There -- I can think of.
- 04:17:27 20 Q. Let --
  - 21 A. Sorry.
  - Q. Let me ask the question.
  - 23 Are you aware as you sit here today of
  - 24 any other targeting options that related to the
- 04:17:34 25 multicultural affinity groups that were involved in

- 04:17:37 1 the subject matter of this lawsuit?
  - 2 A. So these are --
  - 3 MR. BENJAMIN: Objection. Sorry Bella.
  - 4 Objection to form and scope.
- 04:17:48 5 THE DEPONENT: These are distinct. These
  - 6 are interests they were also removed from
  - 7 exclusion. Multicultural affinity targeting
  - 8 options are -- they their own set of options those
  - 9 were also we moved from exclusion more than just
- 04:18:01 10 these two were removed from exclusion.
  - 11 O. (By Ms. Weaver) So can you identify any
  - 12 others that were removed from exclusion?
  - MR. BENJAMIN: Objection to scope.

- 14 THE DEPONENT: I -- I don't know that I
- 04:18:19 15 can think of an example just off the cuff of an
  - 16 interest we removed from exclusion at the time.
  - 17 Q. (By Ms. Weaver) Can Facebook create a
  - 18 list of the exclusions that were ceased as a result
  - 19 of this litigation?
- 04:18:51 20 A. My understanding is that we could.
  - Q. And how would you do that?
  - 22 A. I think we have maintained the one -- or
  - 23 maintained the a list of what we updated because
  - 24 some of these may still be available for inclusion
- 04:19:09 25 and so we would -- we would know which ones those

- 04:19:12 1 are.
  - Q. Other than this instance, are you aware
  - 3 of other deprecated targeting options that have
  - 4 occurred from 2007 to the present and let's exclude
- 04:19:30 5 partner categories as well for now.
  - 6 A. Yes, we -- we have iterates what the
  - 7 targeting options numerous times over the years,
  - 8 but adding and removing targeting options.
  - 9 Q. On how many occasions?
- 04:19:49 10 MR. BENJAMIN: Objection to form. Vague.

- 11 THE DEPONENT: Our review and update is
- 12 pretty continuous. I don't think that there's like
- 13 a -- a finite number of occasions where that's
- 14 happened.
- 04:20:00 15 Q. (By Ms. Weaver) On how many occasions
  - 16 has Facebook deprecated targeting options as a
  - 17 result of litigation or regulatory investigation?
  - MR. BENJAMIN: Objection to form.
  - 19 And I would caution the witness not to
- 04:20:19 20 disclose privileged information in her response.
  - 21 THE DEPONENT: I -- I don't think I can
  - 22 share an exact number.
  - Q. (By Ms. Weaver) Is it more than 20?
  - A. Occasions?
- 04:20:34 25 Q. Yes?

- 04:20:35 1 MR. BENJAMIN: Same objections and
  - 2 caution.
  - 3 THE DEPONENT: I don't think I can share
  - 4 a response.
- 04:20:41 5 Q. (By Ms. Weaver) When you say you don't
  - 6 think you can share, is that because you don't know
  - 7 or because you think it's privileged?

- 8 A. More the latter.
- 9 MS. WEAVER: I just need some clarity
- 04:20:52 10 here counsel. Are you asserting a privilege over
  - 11 the number of times that Facebook has deprecated
  - 12 targeting options following litigation?
  - MR. BENJAMIN: May I ask the witness
  - 14 would helpful to confer about privilege.
- 04:21:09 15 MS. WEAVER: That's fine.
  - 16 THE DEPONENT: That sounds good. Sorry
  - 17 thank you.
  - 18 SPECIAL MASTER GARRIE: Let's go off the
  - 19 record.
- 04:21:16 20 THE VIDEOGRAPHER: Okay we are off the
  - 21 record it's 4:21 p.m.
  - 22 (Recess taken.)
  - THE VIDEOGRAPHER: We are back on the
  - 24 record it's 4:32 p.m.
- 04:32:10 25 MS. WEAVER: Before we broke the pending

- 04:32:12 1 question on how many occasions has Facebook
  - 2 deprecated targeting options as a result of
  - 3 litigation or regulatory investigation.
  - 4 MR. BENJAMIN: And object to form and

- 04:32:22 5 scope.
  - 6 You can answer.
  - 7 THE DEPONENT: I'm aware of two times
  - 8 that we've updated targeting options as a result of
  - 9 settlement that we came to in litigation.
- 04:32:35 10 Q. (By Ms. Weaver) And what are those two
  - 11 times?
  - 12 A. Once is the -- the NAFTA&& settlement in
  - 13 2019 where re limited the targeting options for
  - 14 housing employment and credit ads and the -- this
- 04:32:48 15 other time is this one from Washington state where
  - 16 we moved the capability of exclusion for targeting
  - 17 options or several targeting options.
  - 18 Q. And a later point in time Facebook
  - 19 removed the exclusion targeting option altogether;
- 04:33:03 20 is that right?
  - 21 A. No. Sorry. We -- we you can exclude
  - 22 some types of targeting. That was not a change we
  - 23 made. I'm not sure if that was something I -- I
  - 24 confused on before. Let me know if I can clarify.
- 04:33:19 25 Q. Okay. So for example, today, is it okay

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04:33:24 1 on Facebook for advertisers to exclude people with

- 2 veteran or military -- military status?
- 3 MR. BENJAMIN: Objection to form and
- 4 scope.
- 04:33:39 5 THE DEPONENT: We don't have someone's
  - 6 military status. But there that related targeting
  - 7 options like an interest in -- in a veteran topic
  - 8 would not be available for exclusion after the
  - 9 updates that we made in 2018.
- 04:33:59 10 Q. (By Ms. Weaver) And so prior to 2018,
  - 11 advertisers could exclude from related targeting
  - 12 options users with veteran or military status; is
  - 13 that right?
  - 14 MR. BENJAMIN: Objection to form
- 04:34:23 15 misstates and scope.
  - 16 THE DEPONENT: The witness, so for
  - 17 example, topics similar to the ones we were
  - 18 discussing before such as wheelchair users, those
  - 19 were available for inclusion and exclusion in 2018
- 04:34:36 20 we updated them to be inclusion only and not usable
  - 21 for exclusion.
  - Q. (By Ms. Weaver) And the other similar
  - 23 interests that were available for exclusion prior
  - 24 to 2018 included sexual orientation and disability;
- 04:34:51 25 is that right?

- 04:34:53 1 A. Interests. Again not specifically based
  - 2 on people's characteristics.
  - 3 O. And so what kind of interests are related
  - 4 to sexual orientation in Facebook's view?
- 04:35:09 5 MR. BENJAMIN: Objection to form and
  - 6 scope. Foundation.
  - 7 THE DEPONENT: An example would be a
  - 8 cause or an organization related to LGBTQ.
  - 9 Q. (By Ms. Weaver) Would it also include
- 04:35:26 10 visits to specific requisites looking for -- for
  - 11 example, HIV medication?
  - MR. BENJAMIN: Same objections.
  - 13 THE DEPONENT: That's not part of
  - 14 interest targeting I'm not sure the connection in
- 04:35:38 15 there.
  - 16 Q. (By Ms. Weaver) Okay. What other
  - 17 interests targeting did Facebook deem to be
  - 18 associated with sexual orientation?
  - 19 A. That --
- 04:35:48 20 MR. BENJAMIN: Objection -- objection to
  - 21 form and scope.
  - 22 THE DEPONENT: Specifically it was
  - 23 interest that were related to causes organizations

- 24 or events that tied to into LGBTQ.
- 04:36:04 25 Q. (By Ms. Weaver) Does have Facebook have

- 04:36:05 1 a list of the -- that were related to those
  - 2 categories as well meaning, veteran military status
  - 3 sexual orientation and disable?
  - 4 MR. BENJAMIN: Objection to form?
- 04:36:17 5 A. We have as I was explaining before we
  - 6 would be able to look at the interest that are
  - 7 currently only or that were updated to be included
  - 8 only. And that would be effectively what you are
  - 9 asking I think.
- 04:36:34 10 Q. (By Ms. Weaver) Who you formal counsel
  - 11 for production of those?
  - MS. WEAVER: Okay. I'm going to go back
  - 13 to the third time to exhibit 657 this not your put
  - 14 that is my fault to the bullet point Facebook's
- 04:36:57 15 policies re striking users advertisers of use of
  - 16 advertising related for the use case do you
  - 17 remember we tried to talk about a couple of time
  - 18 now.
  - 19 THE DEPONENT: Yes, we discuss it
- 04:37:08 20 earlier.

- Q. (By Ms. Weaver) We did. What steps did
- 22 Facebook take to enforce those policies that is
- 23 limited to advertisers use of advertising related
- 24 data to the use case one of the impactful an --
- 04:37:29 25 important items that we take is that we built our

- 04:37:32 1 product to help prevent for potentially misuse and
  - 2 as example we the -- the minimum audience threshold
  - 3 and only providing aggregated information to
  - 4 advertisers without disclosing to them who saw
- 04:37:48 5 their ad are protections. To ensure that -- that
  - 6 advertisers only use advertising related data for
  - 7 the use case of placing ads.
  - 8 O. Is there any kind of task force that vets
  - 9 to make sure that advertisers are using advertising
- 04:38:08 10 related data only for the advertising?
  - 11 MR. BENJAMIN: Objection to form.
  - 12 THE DEPONENT: Again, because we don't
  - 13 disclose that information advertisers don't have
  - 14 access to who saw the ad or and they are not able
- 04:38:27 15 to -- to re-identify that which is the primary
  - 16 restriction and protection.
  - 17 Q. (By Ms. Weaver) Okay. The question was,

- 18 is there any kind of task force at Facebook that
- 19 operates to make sure advertisers are using
- 04:38:44 20 advertising related data only for advertising?
  - 21 A. I'm not clear what they would look for
  - 22 since our product does not provide the user level
  - 23 information to advertiser.
  - Q. Okay. But I'm not asking I'm literally
- 04:39:03 25 just saying is there task force --

- 04:39:07 1 MR. BENJAMIN: Objection to form.
  - 2 THE DEPONENT: I -- I understand the
  - 3 question. It seems to assume that the task force
  - 4 would have to look for something and my point is
- 04:39:17 5 that the product does not give the advertisers who
  - 6 saw their ad so I'm not sure what the task for what
  - 7 would accomplish.
  - 8 Q. (By Ms. Weaver) Okay. I have that
  - 9 answer I don't give it again. The question is
- 04:39:30 10 today does Facebook have a task force that is
  - 11 focused on ensuring that advertisers use of
  - 12 advertising related data is limited to advertising?
  - MR. BENJAMIN: Objection to form.
  - 14 Argumentative. And asked and answered.

- 04:39:58 15 THE DEPONENT: The product build those
  - 16 protections in we don't have an additional task
  - 17 force looking at this specifically because the
  - 18 product has those protections built in.
  - 19 Q. (By Ms. Weaver) Thank you.
- 04:40:13 20 What is the ads integrity team?
  - 21 A. Ads integrity was -- was a team it's been
  - 22 renamed business integrity. Uphold our advertising
  - 23 policies so the policies that -- that defense date
  - 24 the type of content and restrictions on

04:40:39 25 advertising.

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- 04:40:41 1 Q. What specific policies does the ads
  - 2 integrity team enforce and can you give examples of
  - 3 such enforcement?
  - 4 MR. BENJAMIN: Objection to form.
- 04:40:52 5 THE DEPONENT: Yeah, the -- as an example
  - 6 under our policies, there were restricted content
  - 7 prohibited content. The advertiser or business
  - 8 integrity team manages those policies and and
  - 9 builds our detection for them.
- 04:41:11 10 Q. (By Ms. Weaver) What do you mean by
  - 11 restricted content?

- 12 A. So as an example content that we require
- 13 specific targeting parameters for or disallow other
- 14 targeting parameters for.
- 04:41:24 15 Q. What is an example of content that you
  - 16 require specific targeting parameters for?
  - 17 A. In order to run alcohol ad the
  - 18 advertising must targeting 18 plus or 21 plus
  - 19 depending on the location -- they are trying to run
- 04:41:40 20 their ad.
  - Q. Any other examples that you can think of?
  - 22 A. Yes. Weight loss ads must be 18 and
  - 23 above similar gambling ads require specific half --
  - 24 an advertisers choosing to run a gambling ad has to
- 04:41:57 25 also have age targeting set appropriately for their

- 04:42:01 1 location. Their content we also outright prohibit
  - 2 that's under our --
  - 3 Q. Like what--
  - 4 A. We don't allow weapons to be sold in ads.
- 04:42:12 5 We don't allow discriminatory content. We don't --
  - 6 back to restricted examples we don't housing
  - 7 employment and credit advisors to run -- they have
  - 8 to run with the specific limited targeting options

- 9 provided to them after 2019 that's an example of
- 04:42:29 10 the business integrity team enforces.
  - 11 Q. Anything else?
  - 12 A. Yes. If -- I mean the -- the policies in
  - 13 our advertising policies are enforced by our
  - 14 business integrity team. Those were examples.
- 04:42:49 15 Q. Right.
  - 16 So what specific policies are you
  - 17 thinking of that they say that they enforce?
  - 18 MR. BENJAMIN: Objection to form and
  - 19 scope.
- 04:43:05 20 THE DEPONENT: I am sorry can you repeat
  - 21 the question.
  - Q. (By Ms. Weaver) Yes.
  - 23 So I -- if go to Exhibit 657 and the --
  - 24 the middle bullet point says "Ms. Leone will be
- 04:43:16 25 prepared to discuss the role of Facebook's ads's

- 04:43:19 1 integrity team."
  - Do you see that?
  - A. Yes.
  - 4 Q. So what specific policies is the ads
- 04:43:26 5 integrity team enforcing?

- 6 A. Our advertising policies are what they
- 7 enforce. The examples I gave with the restricted
- 8 content and prohibit content sub policies within
- 9 there. I don't know the full set of policies off
- 04:43:42 10 by heart.
  - 11 Q. Can you think of any other examples as
  - 12 sit here.
  - 13 MR. BENJAMIN: Objection to form. Vague.
  - 14 THE DEPONENT: In addition to the
- 04:43:58 15 restricted content policies that I --
  - 16 Q. (By Ms. Weaver) Yes.
  - 17 A. Explained such as alcohol, gambling,
  - 18 weight loss, and the prohibited content, such as
  - 19 weapons, hateful content -- hateful anything
- 04:44:11 20 that -- that goes against our communication
  - 21 community standards if you -- you are promoted
  - 22 something designated a dangerous organization those
  - 23 all areas they were help enforce.
  - Q. So there's a myriad ways in Facebook can
- 04:44:27 25 enforce and limit the scope of advertising content

- 04:44:31 1 sent to users, right?
  - A. We have enforcement for those policies,

- 3 yes.
- 4 Q. But there is no task force to enforce
- 04:44:50 5 whether or not advertisers are using data for use
  - 6 cases other than advertising, correct?
  - 7 MR. BENJAMIN: Objection. Objection to
  - 8 form.
  - 9 THE DEPONENT: Our protections to prevent
- 04:45:02 10 misuse is that we built the products so they don't
  - 11 get that data. That is an upstream protection that
  - 12 is distinct from enforcing a content policy where
  - 13 there isn't the same corollary it's -- it's a very
  - 14 different problem space so we built it into the
- 04:45:21 15 product.
  - 16 Q. (By Ms. Weaver) So if you learned that
  - 17 third parties were scraping for example Facebook
  - 18 user IDs there's no task force that could
  - 19 investigate to prevent it Facebook simply relies on
- 04:45:30 20 the fact that the policy is they are not supposed
  - 21 to do that; is that right?
  - MR. BENJAMIN: Objection to form.
  - 23 Misstates prior testimony. Argumentative.
  - 24 THE DEPONENT: That's incorrect. We have
- 04:45:43 25 team that look at scraping. That is outside of

- 04:45:46 1 advertising. It is not relevant to the information
  - 2 we provide to advertisers in their performance --
  - 3 in the performance of their ads.
  - 4 Q. (By Ms. Weaver) And would you view
- 04:45:58 5 yourself as a privacy specialist?
  - 6 A. That is not a title I assign to myself.
  - 7 Q. Okay. So within?
  - 8 A. I'm not sure what you mean by that.
  - Sure.
- 04:46:09 10 Within the scope of your -- have been the
  - 11 privacy and privacy and policy manager at Facebook
  - 12 since November 2019; is that right?
  - 13 A. Yes.
  - 14 Q. And what are your duties and
- 04:46:22 15 responsibilities in that role?
  - 16 A. I work with our ads product teams to
  - 17 understand where they are going to develop future
  - 18 products I consult with them. I work with them on
  - 19 updates to our current products.
- 04:46:36 20 Q. So what's the privacy piece of your job
  - 21 description that appears in your title?
  - 22 A. I focus on Facebook's data use.
  - Q. And when you say Facebook's data use what
  - 24 do you mean?

04:46:48 25 A. I mean the type of information that we

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- 04:46:51 1 use for ads.
  - Q. And do you focus on what information
  - 3 Facebook shares with third parties?
  - 4 A. That sometimes is in scope in the context
- 04:47:03 5 of ads.
  - 6 Q. Is there somebody else whose preliminary
  - 7 responsible for addressing what Facebook -- what
  - 8 information Facebook shared with third parties and
  - 9 whether or not it complies with Facebook's
- 04:47:15 10 policies?
  - 11 MR. BENJAMIN: Objection to form.
  - 12 THE DEPONENT: In the context of scraping
  - 13 more generally across the platform, yes.
  - Q. (By Ms. Weaver) And -- and even more
- 04:47:30 15 high level is there somebody responsible at
  - 16 Facebook for determining whether or not when
  - 17 Facebook shares data with third parties it is
  - 18 complying with Facebook's policies?
  - 19 A. Yes.
- 04:47:42 20 Q. Who is that?
  - 21 A. Our -- our privacy org is part of that

- 22 assessment an example would be Mike Clark.
- Q. Anyone other than Mr. Clark?
- 24 MR. BENJAMIN: Objection to form and

04:48:01 25 scope.

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- 04:48:02 1 THE DEPONENT: He -- he's -- he is the
  - 2 POC I know that -- that is involved in what it
  - 3 sounds like you are getting at which access by
  - 4 third parties to data across Facebook.
- 04:48:16 5 Q. (By Ms. Weaver) What is PoC mean in this
  - 6 context?
  - 7 A. I am sorry. Point of contact.
  - 8 Q. Another person might may think person of
  - 9 color?
- 04:48:26 10 A. I realize.
  - 11 Q. So Mike Clark is the lead person in the
  - 12 privacy organization responsible for enforcing
  - 13 whether or not Facebook's sharing of data with
  - 14 third parties complies with its policy; is that
- 04:48:43 15 right?
  - 16 MR. BENJAMIN: Objection to scope and
  - 17 form.
  - 18 THE DEPONENT: His team manages for my

- 19 understanding his team manages with how third
- 04:49:01 20 parties if they have inappropriately accessed data
  - 21 as an example through the scraping UIDs that you
  - 22 mentioned.
  - Q. (By Ms. Weaver) And what is the a name
  - 24 of his team?
- 04:49:14 25 MR. BENJAMIN: Same objections.

- 04:49:16 1 THE DEPONENT: I'm actually not sure the
  - 2 official name of his team.
  - 3 Q. (By Ms. Weaver) In addition to scraping,
  - 4 is his team the team that is responsible for
- 04:49:24 5 determining if for example, data shared with third
  - 6 parties might allow users to be personally
  - 7 identified?
  - 8 MR. BENJAMIN: One moment.
  - 9 Objection to form and scope.
- 04:49:48 10 THE DEPONENT: I -- I'm not sure of the
  - 11 parameters of what you mean. I don't think that
  - 12 there is a singular POC that looks at that. We
  - 13 have our misuse which is what I was explaining
  - 14 Mike Clark's team does and then we also have the
- 04:50:08 15 protections we have put in place within ads to

- 16 ensure that we don't provide identifiable
- 17 information to advertiser. So I -- do you mind
- 18 clarifying what with you are look are that is
- 19 distinct from those two.
- 04:50:21 20 Q. (By Ms. Weaver) You understand that
  - 21 protections are different than enforcement, right?
  - 22 A. Yes.
  - Q. So I'm trying to find out who is -- who
  - 24 is responsible for enforcing that Facebook does not
- 04:50:36 25 share identifiable information with third parties?

- 04:50:42 1 MR. BENJAMIN: Objection.
  - Q. (By Ms. Weaver) That -- do you know who
  - 3 that is if anyone?
  - 4 MR. BENJAMIN: Objection to form and
- 04:50:46 5 scope.
  - 6 THE DEPONENT: The access third parties
  - 7 to our -- to do the across Facebook is something
  - 8 Mike Clark's team evaluates.
  - 9 Q. (By Ms. Weaver) What's your
- 04:51:02 10 understanding of the definition of personal's
  - 11 identifiable information?
  - MR. BENJAMIN: Scope and form.

- 13 THE DEPONENT: Something that is
- 14 specifically tied to a user and uniquely tied to
- 04:51:17 15 and user.
  - 16 Q. (By Ms. Weaver) Do you have an
  - 17 understanding that actually personally identifiable
  - 18 information is anything that could be used to
  - 19 reasonably identify a person?
- 04:51:30 20 MR. BENJAMIN: Objection to form and
  - 21 scope and to the extent it calls for leverage.
  - 22 THE DEPONENT: I understand that's a
  - 23 definition that you presented and I -- I understand
  - 24 what you mean.
- 04:51:44 25 Q. (By Ms. Weaver) What is Facebook's

- 04:51:45 1 understanding of what it means when they promise
  - 2 that will not provide personal identifiable
  - 3 information to advertiser?
  - 4 A. That we --
- 04:51:57 5 MR. BENJAMIN: Objection -- objection to
  - 6 form and scope of this deposition.
  - 7 THE DEPONENT: That we don't provide
  - 8 information to advertisers so that they -- can
  - 9 understand who saw their ad.

- 04:52:12 10 Q. (By Ms. Weaver) And just again to
  - 11 address the scope, under topic 8 and page three of
  - 12 Exhibit 657 of the letter that Mr. Benjamin wrote
  - 13 me, topic 8 is type of purpose and data and
  - 14 information Facebook provided?
- 04:52:31 15 MR. BENJAMIN: Special Master?
  - MS. WEAVER: And it's states that
  - 17 Ms. Leone will be prepared to discuss how Facebook
  - 18 tracks user data received from advertisers it's
  - 19 relationships and the ads placed and tracks data if
- 04:52:47 20 any provided to advertisers.
  - Q. (By Ms. Weaver) Going back to the
  - 22 question?
  - 23 MR. BENJAMIN: Special Master would
  - 24 prefer outside of the presence of the witness.
- 04:52:57 25 SPECIAL MASTER GARRIE: I would actually

- 04:52:59 1 would be it okay Ms. Leone if you go to the
  - 2 breakout room for -- for a few minutes.
  - 3 THE DEPONENT: Yup.
  - 4 MR. BENJAMIN: Five minutes wait until
- 04:53:10 5 your counsel comes and gets you.
  - 6 MR. BENJAMIN: Are we on the record.

- 7 SPECIAL MASTER GARRIE: Up.
- 8 MR. BENJAMIN: Thank you just to respond
- 9 briefly to counsel's weaver Special Master so the
- 04:53:26 10 letter actually reads in first bullet says the
  - 11 tracking of the type and purpose of data and
  - 12 information Facebook be receives, I believe
  - 13 Counsel Weaver only read the part after tracking
  - 14 power over association and identification of user
- 04:53:41 15 info was you know, the subject of topic 4 and other
  - 16 30(b)(6) testimony.
  - 17 So my scope objection was asserted in
  - 18 legal conclusion response to a question about --
  - 19 ire what is Facebook's understanding what it means
- 04:53:57 20 when promise they will not provide personal
  - 21 identifiable information to advertiser.
  - I don't think that that relates to the
  - 23 tracking of the type of purpose and data and
  - 24 information Facebook receives and, again,
- 04:54:10 25 plaintiffs are already taken two different 30(b)(6)

- 04:54:13 1 depositions on association identification under
  - 2 topic 4.
  - 3 SPECIAL MASTER GARRIE: Counsel Weaver is

- 4 there anything you want to put on the record.
- 04:54:24 5 MS. WEAVER: Sure. This witness has
  - 6 testified already at length that Facebook is not
  - 7 providing personally identifiable information I am
  - 8 trying to understand what she's means when she says
  - 9 on behalf of Facebook.
- 04:54:38 10 MR. BENJAMIN: I believe Ms. Leone has
  - 11 testified repeatedly that Facebook doesn't provide
  - 12 advertisers with user level data.
  - 13 SPECIAL MASTER GARRIE: User -- user
  - 14 granular data grammar you already level yeah.
- 04:54:55 15 MR. BENJAMIN: So again topic eight I
  - 16 just want to start reading with the letter what
  - 17 actually says into the record.
  - 18 It says that Ms. Leone basically be
  - 19 prepared to address first bullet the tracking of
- 04:55:05 20 the type and purpose of data and information
  - 21 Facebook received table reflects 8A. That's the
  - 22 language that Counsel Weaver read in part.
  - 23 And she was asked to define a term
  - 24 personally identifiable information and I objected
- 04:55:20 25 to it as being out of scope.

- 04:55:22 1 MS. WEAVER: That's what just happened
  - 2 but three hours she spent along talking about
  - 3 certain information does not identify the user
  - 4 including Geo location and all of the other
- 04:55:32 5 categories. I want to understand what Facebook
  - 6 be -- the people in Facebook advertising department
  - 7 who are saying we don't give third parties
  - 8 personally identifiable information. I am entitled
  - 9 to corporate testimony on what they mean when.
- 04:55:48 10 SPECIAL MASTER GARRIE: All right. Is
  - 11 the witness prepared to -- well before we get into
  - 12 to the next -- of all is the witness to prepared to
  - 13 answer the question on behalf of Facebook ore not.
  - 14 MR. BENJAMIN: Which question
- 04:56:00 15 specifically Special Master.
  - 16 SPECIAL MASTER GARRIE: The one
  - 17 Counsel Weaver just asked that you -- you have
  - 18 objected that's outside of scope.
  - 19 MS. WEAVER: Let me if I can just read
- 04:56:10 20 from 218 lines three through ten.
  - 21 So the representation here is that
  - 22 Facebook is not providing any personal identifiable
  - 23 information through the targeted advertising
  - 24 process right.
- 04:56:32 25 MR. BENJAMIN: Objection to form. Vague

- 04:56:33 1 want we don't provide advertisers information about
  - 2 the users who saw their ad and how to identify
  - 3 those users.
  - 4 So she's made this assertion that's a
- 04:56:43 5 shield for Facebook and I just want to ask what our
  - 6 understanding of personally identifiable
  - 7 information is.
  - 8 MR. BENJAMIN: That isn't -- but that
  - 9 isn't the term that she used and you already taken
- 04:56:54 10 two different 30(b)(6) depositions about this
  - 11 topic.
  - MS. WEAVER: No I have not and in fact
  - 13 we'll get to but Mr. Clark refused to actually
  - 14 define the term.
- 04:57:04 15 MR. BENJAMIN: She -- she's not been
  - 16 designated to provide corporate testimony on
  - 17 Facebook's understanding of the meaning of
  - 18 personally identifiable information.
  - MS. WEAVER: And here again enumerate
- 04:57:17 20 every question we have we were going to ask the
  - 21 very question is what data is Facebook giving to
  - 22 third parties. And is it identifiable.

- MR. BENJAMIN: That.
- MS. WEAVER: The next question.
- 04:57:31 25 SPECIAL MASTER GARRIE: Wait, wait

- 04:57:32 1 everybody interpreting my -- measliest as a reason
  - 2 to talk it's I'm thinking. My apologies.

  - 4 Counsel Benjamin is the witness prepared to answer
- 04:57:50 5 the question on behalf of Facebook?
  - 6 MR. BENJAMIN: The witness was not
  - 7 designated to provide the company's position about
  - 8 the meaning of personally identifiable information.
  - 9 SPECIAL MASTER GARRIE: I understand that
- 04:58:05 10 that's not the question that's spending.
  - 11 MR. BENJAMIN: So just look before we
  - 12 went -- went -- went colloquy Special Master I
  - 13 really same page.
  - 14 One moment Ms. Weaver if you have in
- 04:58:34 15 front of I just want to make sure that we are
  - 16 discussing the same question. What is Facebook's
  - 17 understanding this is line 12 what is Facebook
  - 18 understanding of what it means when they promise
  - 19 that will not provide person identifiable

- 04:58:52 20 information to advertiser.
  - 21 That was the question that to which I
  - 22 objected on form and scope and then Ms. Weaver went
  - 23 to the bullet point in the letter that she read
  - 24 part of.
- 04:59:07 25 SPECIAL MASTER GARRIE: I'm very aware

- 04:59:09 1 and my question is -- is Facebook -- is the witness
  - 2 prepared to answer the question on behalf of
  - 3 Facebook.
  - 4 MR. BENJAMIN: So I believe if question
- 04:59:36 5 that's pending misstates the record.
  - 6 So I can't tell you Special Master that
  - 7 she's prepared to answer that specific question
  - 8 because I think it's objectionable in a number of
  - 9 ways. What she's said is that we don't provide
- 04:59:53 10 data to advertisers identifying individual users.
  - 11 She hasn't provided testimony based on a definition
  - 12 of personal -- of PII. So she's very prepared to
  - 13 explain all the ways.
  - 14 SPECIAL MASTER GARRIE: I just have a
- 05:00:09 15 simple, so -- I -- I understand your objecting to
  - 16 the question and in the form.

- 17 My question is -- the question as it is
- 18 is she prepared to answer the question on behalf of
- 19 Facebook not the form of the question not whether
- 05:00:28 20 it's -- just and then I can.
  - 21 MR. BENJAMIN: Right it's just -- yeah, I
  - 22 think the answer is Special Master it's just not in
  - 23 scope. So.
  - MS. WEAVER: Okay. I just want to go on
- 05:00:39 25 the record, that...

- 05:00:41 1 SPECIAL MASTER GARRIE: We are still
  - 2 still on the record.
  - 3 MS. WEAVER: Fair enough.
  - 4 SPECIAL MASTER GARRIE: Can I just
- 05:00:45 5 finish.
  - 6 MS. WEAVER: Yes.
  - 7 SPECIAL MASTER GARRIE: Let me just --
  - 8 just finish here. That's fine counsel --
  - 9 Counsel Benjamin I just so then before we go
- 05:00:53 10 further. I want respectful of the witnesses's
  - 11 time. And the effort that has been done and if
  - 12 there's an issue about scope and other things and
  - 13 the witness isn't prepared to answer the question.

- 14 Counsel Weaver on behalf of Facebook I mean, we --
- 05:01:18 15 I mean, there's -- I'm not going to permit a line
  - 16 of questioning whether or not prepared to answer it
  - 17 if so -- well Counsel Weaver if you would like to
  - 18 respond on the record and then Counsel Benjamin
  - 19 rebuttal and then I'll make the ruling quickly
- 05:01:37 20 okay.
  - 21 SPECIAL MASTER GARRIE: Counsel Weaver.
  - 22 MS. WEAVER: Question we marked as
  - 23 Exhibit 658 a couple of hours ago. We covered the
  - 24 promise in this document -- there's a document
- 05:01:46 25 identified by Facebook as a document that this

- 05:01:50 1 witness would be prepared to testify. This is
  - 2 second time this has happened in this indicates.
  - 3 That document says at page 5 we don't share
  - 4 information about advertisers that personally
- 05:02:01 5 identifies individuals unless they have given us
  - 6 permission. They then testified about this
  - 7 document and when I asked, the representation here
  - 8 is that Facebook is not providing any personally
  - 9 identifiable information through the targeting --
- 05:02:16 10 the targeted advertising process right and she said

- 11 we don't provide advertisers information about the
- 12 users who saw their ad and how to identify those
- 13 users.
- 14 Now I'm trying to dig in when we talk
- 05:02:28 15 about enforcement and all of sudden she can't
  - 16 define the words in the document that Facebook
  - 17 identified that she would be prepared to discuss
  - 18 with regard very specifically to what Facebook
  - 19 shares through the targeted advertising process I
- 05:02:42 20 think it's clearly within scope and at some point
  - 21 we are going to bring a motion to compel Facebook's
  - 22 to identify and define what personally identifiable
  - 23 information is in documents that they are
  - 24 identifying their witnesses having knowledge of use
- 05:03:02 25 yeah Special Master the rebuttal Counsel Weaver

- 05:03:05 1 said it already. This -- this document itself was
  - 2 the subject of extensive testimony. Ms. Leone
  - 3 answer all the questions she was asked about it
  - 4 they didn't define personally identifiable
- 05:03:15 5 information the question that I read is clearly
  - 6 outside of scope.
  - 7 Plaintiffs have already taken two

- 8 depositions on this subject. And we were very
- 9 clear about what Ms. Leone was designated to
- 05:03:25 10 testify about to in -- all of the prior meet and
  - 11 conference so again I just want to be clear what
  - 12 she sit consistently throughout this deposition is
  - 13 that Facebook doesn't provide advertisers with user
  - 14 level data.
- 05:03:39 15 And Counsel Weaver is should feel free to
  - 16 explore with her what that means. I was just
  - 17 logging a scope oaks to the specific question that
  - 18 was asked which relies on a term that Ms. Leone
  - 19 hasn't used and that isn't in the document that
- 05:03:57 20 Counsel Weaver just pointed to.
  - 21 MS. WEAVER: It is in the document. The
  - 22 word personal identifiable.
  - 23 SPECIAL MASTER GARRIE: It's page.
  - MS. WEAVER: Sorry?
- 05:04:04 25 SPECIAL MASTER GARRIE: 85 that word it's

- 05:04:08 1 potentially page five of the document I just read
  - 2 it myself. So that -- unless I'm reading different
  - 3 document Counsel Benjamin, but.
  - 4 MR. BENJAMIN: I was referring to the

- 05:04:19 5 phrase "personal identifiable information or PII"
  - 6 which we all understand can be a term of art. So
  - 7 again.
  - 8 SPECIAL MASTER GARRIE: Counsel Weaver.
  - 9 No I heard I understand Counsel Benjamin.
- 05:04:38 10 MR. BENJAMIN: Thank you.
  - 11 SPECIAL MASTER GARRIE: Counsel Weaver.
  - 12 MS. WEAVER: I'm looking at just give me
  - 13 a moment here.
  - 14 MS. WEAVER: What is difference between
- 05:04:50 15 information that personally identifies individuals
  - 16 or personally identifiable information? Aren't I
  - 17 styled to Facebook's understanding of that the
  - 18 sentence says, information that -- with advertiser
  - 19 that personally identifies individual and if I ask
- 05:05:04 20 about personally identifiable information Facebook
  - 21 refuse fuses to provide and this is the second time
  - 22 and Mr. Clark's deposition he said he needed to
  - 23 look at a document to give me testimony and when we
  - 24 gave it to him it had this term it says personally
- 05:05:18 25 identifiable information in it and Facebook

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05:05:21 1 wouldn't provide a deposition.

- 2 And now Ms. Leone is saying this -- this
- 3 guy for responsibility for?
- 4 THE DEPONENT: He doesn't what personal's
- 05:05:31 5 identifiable information. Now I want to if she
  - 6 does.
  - 7 I don't know how to get the bottom of
  - 8 this case. I can bring a motion to compel to bring
  - 9 her back. I will. Somebody owes got to be able to
- 05:05:42 10 answer that question before the close of this
  - 11 discovery.
  - 12 MR. BENJAMIN: I am sorry Ms. Beaver step
  - 13 sentences very request pick No. one I think
  - 14 Counsel Weaver was actually examining Ms. Leone
- 05:05:53 15 about the document, she asked her what that
  - 16 language meant. And that was appropriate and I
  - 17 think that testimony was provided.
  - 18 If they puts the -- if puts the document
  - 19 in front of Ms. Leone again, and ask her for
- 05:06:05 20 Facebook's understanding of that language in the
  - 21 policy, maybe that's a way to cut through this.
  - 22 All was re axing Special Master was the --
  - 23 SPECIAL MASTER GARRIE: No, no I get it.
  - 24 Counsel Benjamin I understand what I get re axing
- 05:06:18 25 too we kind of gone off the rails a bit. I

- 05:06:20 1 recognized that. I let you guys speak Aaron
  - 2 reports glee too much.
  - Not a reflection of your litigation
  - 4 produce less it's just a little field of what the
- 05:06:35 5 action had to do with.
  - 6 Counsel Weaver with the information that
  - 7 has been provided by Counsel Benjamin, you can --
  - B the witness isn't prepared to testify on behalf of
  - 9 Facebook the way the question is phrased if you
- 05:06:55 10 want to rephrase the question and explore the topic
  - 11 further it's perfectly reasonable. If you wish to
  - 12 bring amok to compel to get the definition of
  - 13 personal identifiable information from a Facebook's
  - 14 designated representative you are well within your
- 05:07:13 15 rights but this witness is prepared to testify on
  - 16 the topics and the question was asked, so with that
  - 17 in mind I ask consider as a strong ask, that you
  - 18 consider RID -- rephrasing your question with the
  - 19 information that's been provided recognizing that
- 05:07:39 20 the witness simply isn't prepare to testify on
  - 21 behalf of Facebook the way the question is being
  - 22 asked.
  - MS. WEAVER: Okay.

24 MR. BENJAMIN: Thank you Special Master.

05:07:52 25 SPECIAL MASTER GARRIE: That doesn't just

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- 05:07:53 1 to for the record that doesn't mean plaintiffs
  - 2 aren't entitled to a witness to answer or explain
  - 3 if they feel that that information is critical or
  - 4 necessary to their case.
- 05:08:04 5 MS. WEAVER: I mean one I would say is
  - 6 Facebook providing documents to us with these terms
  - 7 in it, and then I ask about them and they tell me
  - 8 it's not within the scope, I mean do I have to go
  - 9 through every document that has terms in it and
- 05:08:19 10 identify now within the document you better be able
  - 11 to talk about these terms?
  - 12 SPECIAL MASTER GARRIE: No.
  - MR. BENJAMIN: Yeah.
  - 14 SPECIAL MASTER GARRIE: I think -- I
- 05:08:28 15 think -- no. And I -- at least from where I sit.
  - 16 But I would just the particular question you have
  - 17 asked and the way it was asked I think if you reask
  - 18 the question using.
  - 19 MS. WEAVER: Okay. That probably I think
- 05:08:49 20 Counsel Benjamin allude you had one possible

- 21 approach to getting forward progress may or may
- 22 not. Depending on -- he on where we go. So well
- 23 call the witness back Counsel Benjamin and we'll
- 24 keep going.
- 05:09:07 25 MR. BENJAMIN: Thank you.

- 05:09:12 1 THE COURT REPORTER: Can we take five?
  - 2 SPECIAL MASTER GARRIE: We can.
  - 3 MS. WEAVER: How much time do we have?
  - 4 All right. Let's go off the record.
- 05:09:19 5 THE VIDEOGRAPHER: Off the record it's
  - 6 5:09 p.m.
  - 7 (Recess taken.)
  - 8 THE VIDEOGRAPHER: We are back on the
  - 9 record it's 5:19 p.m.
- 05:19:41 10 Q. (By Ms. Weaver) Ms. Leone, I will ask
  - 11 you to take a look at Exhibit 658?
  - 12 A. I have it up.
  - 13 Q. And turning to the page we discuss
  - 14 earlier and on page five and there's a bullet point
- 05:19:57 15 that says, "we don't share information with
  - 16 advertisers that personally identifies individuals
  - 17 unless they have given us permission."

- 18 Do you see that?
- 19 A. Yes.
- 05:20:07 20 Q. What is your understanding of information
  - 21 that personally identifies individuals?
  - 22 A. In the context of ads it's that we do not
  - 23 share with the advertiser who saw their ad so that
  - 24 they understand who that user was.
- 05:20:23 25 Q. And when you say who -- we do not share

- 05:20:30 1 who saw their ad.
  - What do you mean?
  - 3 A. The user who saw their ad we don't share
  - 4 the identity oaf that user with the advertiser.
- - 6 enables third parties to identify the user?
  - 7 MR. BENJAMIN: Objection to form.
  - 8 THE DEPONENT: No as I mentioned our
  - 9 product -- the protections in our product such as
- 05:20:58 10 the performance metrics are aggregated to avoid an
  - 11 advertiser re associating and trying to use the
  - 12 identifier who user the ad.
  - 13 Q. (By Ms. Weaver) And do you think that
  - 14 Geo location is an example of information that

- 05:21:15 15 personal identifies an individual?
  - MR. BENJAMIN: Objection to form.
  - 17 THE DEPONENT: In the context of ads, we
  - 18 don't share who viewed the ad or their location
  - 19 with an advertiser.
- 05:21:37 20 Q. (By Ms. Weaver) But if an advertiser is
  - 21 seeking to advertise within a 1 mile radius and/or
  - 22 if they are using their own customer list, doesn't
  - 23 the advertisers know who the person is?
  - 24 MR. BENJAMIN: Objection to form and
- 05:21:54 25 scope.

- 05:21:56 1 THE DEPONENT: No. They, for example if
  - 2 someone selects a radius or selects their location
  - 3 targeting, they don't know who sees the ad. We
  - 4 don't share the information with them about whose
- 05:22:10 5 seeing the ad.
  - 6 Q. (By Ms. Weaver) Okay. So the -- is your
  - 7 testimony on behalf of Facebook is that because
  - 8 Facebook is not sharing who saw the ad, it is not
  - 9 sharing information that personally identifies
- 05:22:23 10 individuals; is that correct?
  - 11 MR. BENJAMIN: Objection to form.

- 12 Misstates.
- 13 THE DEPONENT: We don't share information
- 14 about who saw the ad to the advertiser so that can
- 05:22:38 15 identify that user.
  - 16 Q. (By Ms. Weaver) I understand that you
  - 17 have keep repeating the sentence I'm trying to
  - 18 drill in what you mean by who saw the ad when you
  - 19 say we don't identify who, do you mean by name?
- 05:22:52 20 A. I mean individually users their name an
  - 21 example similar to lease weaver that is not what we
  - 22 shared with advise verse.
  - Q. Okay. Can you give me the full list what
  - 24 think it is that Facebook does not share such that
- 05:23:06 25 it is not sharing information that personal's

- 05:23:10 1 identifies individuals?
  - 2 MR. BENJAMIN: Objection to form.
  - 3 THE DEPONENT: I can't define everything
  - 4 we don't share. It's --
- 05:23:24 5 Q. (By Ms. Weaver) Let me put it this way.
  - 6 What is that you think is information that
  - 7 personally identifies individuals?
  - 8 MR. BENJAMIN: Objection to form.

- 9 THE DEPONENT: In the context.
- 05:23:40 10 Q. (By Mr. Benjamin) Sorry objection to
  - 11 form and scope. I understand Counsel Weaver still
  - 12 to be examining you about Exhibit 658 and the
  - 13 language in that document.
  - 14 You can answer?
- 05:23:51 15 THE DEPONENT: In the context of ads it's
  - 16 that we do not provide advertisers with information
  - 17 to understand who saw their ad specifically which
  - 18 users saw their ad.
  - 19 Q. (By Ms. Weaver) Give me the examples of
- 05:24:03 20 the information that you just referred to in that
  - 21 answer?
  - 22 A. We don't -- in our -- as an example in
  - 23 our performance metrics those are aggregated so
  - 24 that an advertiser doesn't know who specifically
- 05:24:26 25 clicked or saw their ad.

- 05:24:28 1 Q. I understand.
  - 2 I'm asking you a different question.
  - What is the kind of information that you
  - 4 think would personally identify an individual?
- 05:24:42 5 MR. BENJAMIN: Objection to form. Asked

- 6 and answered. Vague.
- 7 THE DEPONENT: In the context of ads
- 8 again it's who saw your ad and which users those
- 9 were which would personally identify someone in the
- 05:24:52 10 context of ads.
  - 11 Q. (By Ms. Weaver) So do you mean name, or
  - 12 email or what is the kind -- I need examples of the
  - 13 kind of information that you say would personally
  - 14 identify an individual?
- 05:25:05 15 MR. BENJAMIN: Yeah.
  - 16 Q. (By Ms. Weaver) What do you mean?
  - 17 MR. BENJAMIN: Objection to form. And
  - 18 scope and I will just make a running objection for
  - 19 the sake of the record and so not to impede the
- 05:25:16 20 deposition to this entire line of questioning I
  - 21 counsel weapon verify language within the
  - 22 Exhibit 658 about information that personal's
  - 23 identifies individuals.
  - 24 On that basis you can answer.
- 05:25:34 25 THE DEPONENT: As an example we don't

- 05:25:36 1 share with advertisers the person who saw the ad
  - 2 which would include their name, their UID. Or

- 3 their email because that's not information we share
- 4 with our advertiser in delivering the ads that they
- 05:25:49 5 have placed on Facebook.
  - 6 Q. (By Ms. Weaver) What about IP address is
  - 7 that an example of information that could be used
  - 8 to personally identify an individual?
  - 9 MR. BENJAMIN: Same objections to form
- 05:26:01 10 and scope.
  - 11 THE DEPONENT: It is not information we
  - 12 share with an advertiser as a starting point. In
  - 13 the context of ads. Again it's not information
  - 14 with share with advertisers about who is seeing
- 05:26:24 15 their ad.
  - 16 Q. (By Ms. Weaver) If a advertiser wants to
  - 17 target IP addresses orgy why location, in your
  - 18 understanding could that be used to identify an
  - 19 individual?
- 05:26:37 20 A. Our targeting options --
  - 21 MR. BENJAMIN: Sorry, Bella.
  - 22 Same objections.
  - 23 THE DEPONENT: Our targeting options
  - 24 aren't based on IP address that's not a targeting
- 05:26:47 25 option we offer.

- 05:26:48 1 Q. (By Ms. Weaver) Okay. It is something
  - 2 that you mentioned earlier today do you recall
  - 3 that?
  - 4 A. To clarify, what I explained earlier was
- 05:26:58 5 an advertiser selects where they want their ad to
  - 6 be shown so if they want their ad to be shown to
  - 7 people in Washington state. And then we use that
  - 8 to set the eligible audience for the ad, one of
  - 9 ways someone could be included in it. Includes
- 05:27:17 10 location. Such as IP -- based on their IP that is
  - 11 not the same as giving the advertiser the ability
  - 12 to select IP addresses to target.
  - 13 Q. And is it your understanding that
  - 14 information that can be used one or two data points
- 05:27:38 15 together to identify a person would constitute
  - 16 information that personal's identifies individuals?
  - 17 MR. BENJAMIN: Same objection to form and
  - 18 scope with respect to Exhibit 658.
  - 19 THE DEPONENT: I can understand what you
- 05:27:58 20 mean by the combining data points. I do not see
  - 21 the relevance of how that is happening within our
  - 22 ad targeting or the information we provide back to
  - 23 advertiser because we specifically don't provide
  - 24 information back to advertiser at the user -- at --

05:28:14 25 of individual or user level.

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- 05:28:16 1 Q. (By Ms. Weaver) On behalf of Facebook as
  - 2 sit here today, is Facebook aware that advertisers
  - 3 or AP -- developers were scrapping UIDs via the
  - 4 platform API?
- 05:28:32 5 MR. BENJAMIN: Objection to form and
  - 6 asked and answered repeatedly and scope.
  - 7 THE DEPONENT: I think I clarified that
  - 8 I'm not aware of specific instances it is not my
  - 9 role to be aware of specific instances of which
- 05:28:51 10 scrapping is occurring on the platform.
  - 11 Q. (By Ms. Weaver) Is Uber a partner who
  - 12 advertisers on Facebook using custom audiences?
  - 13 MR. BENJAMIN: Objection to form. Vague.
  - 14 THE DEPONENT: I -- I take you mean Uber
- 05:29:11 15 like the ride share company in.
  - 16 O. (By Ms. Weaver) Yes.
  - 17 A. I don't know the specifics audiences or
  - 18 ways that they set up their ads on our platform.
  - 19 O. We'll take a look at 663 please.
- 05:29:29 20 (Exhibit 633 was marked for
  - 21 identification by the court reporter and is

- 22 attached hereto.)
- THE DEPONENT: 663 I see it.
- Q. (By Ms. Weaver) And take a moment to
- 05:29:33 25 read it and let they know when you have?

- 05:29:45 1 A. This isn't go take me a minute I haven't
  - 2 seen this before.
  - 3 MS. WEAVER: No problem.
  - 4 MR. BENJAMIN: Counsel was this a
- 05:29:52 5 document that was identified before the deposition.
  - 6 MS. WEAVER: No, it was not because I did
  - 7 not expect the testimony that we got and it's in
  - 8 for impeachment purposes.
  - 9 THE DEPONENT: I have read through.
- 05:32:09 10 Q. (By Ms. Weaver) Who is Ian Abernathy?
  - 11 MR. BENJAMIN: Objection. Based on scope
  - 12 I will assert that to a running objection to the
  - 13 question on this document.
  - 14 THE DEPONENT: I don't know who
- 05:32:20 15 Ian Abernathy is I have not worked him before.
  - 16 O. (By Ms. Weaver) Do you know who
  - 17 Grace Molnar is?
  - 18 A. No, I also don't know who Grace is.

- 19 Q. Do you know who Allison Hendrix?
- 05:32:32 20 A. I do know Ali Hendrix.
  - 21 Q. Who is she?
  - 22 A. She's our data policy manager for a
  - 23 developer platform.
  - Q. Looking at Exhibit 663.
- 05:32:43 25 Do you understand it to be email from

- 05:32:45 1 people who work at Facebook relating to their work
  - 2 at Facebook?
  - 3 A. Yes.
  - 4 Q. And looking at the lower email do you see
- 05:32:58 5 Grace emailed Ian "we Uber behavior targeting
  - 6 creating a custom audience list of UIDs that were
  - 7 obtain via a our API but not by them. We are
  - 8 trying to determine where enforcement should sit
  - 9 for things looks like this."
- 05:33:16 10 Do you see that?
  - 11 A. Yes.
  - 12 Q. Have you ever been aware that Uber has
  - 13 created custom audience list of UIDs in or around
  - 14 2013?
- 05:33:26 15 A. No, I was not aware.

- 16 O. And Facebook does not maintain a list of
- 17 advertisers who had scraped user IDs?
- 18 MR. BENJAMIN: Object based on scope and
- 19 form.
- 05:33:39 20 THE DEPONENT: To be clear, my
  - 21 understanding of this is not that Uber scraped
  - 22 these ID.
  - Q. (By Ms. Weaver) Okay. Do you have any
  - 24 personal knowledge of this particular issue?
- 05:33:51 25 A. I don't just from reading this document

- 05:33:55 1 I.
  - Q. Okay.
  - 3 A. But this is the point, this document
  - 4 suggests that Uber had a list of user IDs, correct.
- 05:34:04 5 A. Correct that they specify were obtained
  - 6 through an API but not by Uber.
  - 7 Q. Okay. And they were obtained through
  - 8 Facebook's API, right?
  - 9 A. Through a platform API.
- 05:34:17 10 Q. That is -- that is Facebook's platform
  - 11 API, correct?
  - 12 A. Yes that's what this states.

- 13 Q. Okay. And so Uber has a collection of
- 14 Facebook user IDs according to this document,
- 05:34:29 15 right?
  - MR. BENJAMIN: Objection to form.
  - 17 Foundation and the same continuing objection based
  - 18 on scope.
  - 19 Q. (By Ms. Weaver) Was there any attempt by
- 05:34:38 20 Facebook to prevent Uber from conducting targeted
  - 21 advertising by Facebook knows that Uber possesses
  - 22 user IDs?
  - 23 A. So again I'm -- I'm not familiar with
  - 24 this case. This is the first time I have seen it.
- 05:34:55 25 This email thread reads to me as that is exactly

- 05:34:58 1 what's being discussed.
  - Q. Right.
  - But it didn't happen did it. I mean you
  - 4 are in advertising and you testified that there is
- 05:35:07 5 no list within the advertising department of
  - 6 advertisers on Facebook who possess the user IDs,
  - 7 right?
  - 8 A. No I specifically.
  - 9 MR. BENJAMIN: Objection. Objection.

- 05:35:19 10 Misstates testimony.
  - 11 THE DEPONENT: I specifically noted first
  - 12 that Uber was not scrapping, that's -- that's
  - 13 specified here. And we -- they wouldn't -- this --
  - 14 I think that's the answer Uber.
- 05:35:36 15 Q. (By Mr. Benjamin) You doesn't talk about
  - 16 scraping I will read the question back.
  - 17 You testified that there is no list
  - 18 within the advertising department of advertiser on
  - 19 Facebook who possess user IDs, right?
- 05:35:50 20 MR. BENJAMIN: Same objection.
  - 21 THE DEPONENT: Do you mind reading back
  - 22 the testimony that you are referring to.
  - Q. (By Mr. Benjamin) I just ask you, within
  - 24 the advertising department, is there a list of
- 05:36:01 25 advertiser on Facebook that Facebook knows has come

- 05:36:06 1 into possession of user IDs?
  - 2 MR. BENJAMIN: Objection to form and
  - 3 scope.
  - 4 THE DEPONENT: I'm -- I'm not sure
- 05:36:42 5 like -- a list of advertiser that have access to
  - 6 UID or have obtain UIDs, is not a list that I'm

- 7 aware of within ads. Because I -- I'm not sure the
- 8 connection there back to the fact that they are in
- 9 advertiser.
- 05:37:05 10 Q. (By Mr. Benjamin) Does Facebook have
  - 11 anyway to preventives who Facebook knows possesses
  - 12 -- possesses user IDs from advertising on Facebook?
  - 13 MR. BENJAMIN: Objection to form. Asked
  - 14 and answered.
- 05:37:33 15 THE DEPONENT: Possession of an ad -- the
  - 16 possession of UIDs by an advertiser is -- isn't a
  - 17 factor in -- in -- that's not and evaluation in the
  - 18 creation of an ad. I'm not sure the connection
  - 19 here.
- 05:37:51 20 Q. (By Mr. Benjamin) Does Facebook take any
  - 21 steps to prevent companies that Facebook knows
  - 22 processes user IDs from targeting those users
  - 23 through Facebook's advertising platform?
  - 24 MR. BENJAMIN: Same -- same objections.
- 05:38:08 25 THE DEPONENT: I think this an example

- 05:38:10 1 where like in this email thread they are discussing
  - 2 the steps that need to be taken here. I'm not
  - 3 aware of what happened with Uber, I'm not sure the

- 4 resolution in this one.
- 05:38:24 5 Q. (By Mr. Benjamin) And you in the
  - 6 advertising privacy policy team, have never seen a
  - 7 list of advertiser who possess users IDs or used it
  - 8 for the purposes of saying you may not tiff vise
  - 9 because you were sharing -- you would be able to
- 05:38:40 10 personally target individual users; is that true?
  - MR. BENJAMIN: Objection to form.
  - 12 THE DEPONENT: I -- I don't know of any
  - 13 other cases aside from the one that you have
  - 14 presented currently.
- 05:38:59 15 Q. (By Mr. Benjamin) Does Uber currently
  - 16 advertise on Facebook?
  - 17 MR. BENJAMIN: Objection.
  - 18 THE DEPONENT: I don't know the full list
  - 19 of advertisers who advertise on Facebook, I -- I --
- 05:39:16 20 at points Uber did definitely advertise and in
  - 21 recent years.
  - Q. (By Mr. Benjamin) Okay. Are you
  - 23 prepared to testify about targeted advertisements
  - 24 that take the form of video?
- 05:39:36 25 A. Yes.

- 05:39:37 1 Q. How do targeted advertisements take the
  - 2 form of videos?
  - 3 A. When an advertisers sets up their ad --
  - 4 one second.
- 05:39:54 5 (Brief interruption.)
  - 6 THE DEPONENT: Whether an advertiser sets
  - 7 up their ad they choose the -- the creative for
  - 8 their ad that includes choosing if it's going to be
  - 9 an image or a video and the format and then they
- 05:40:12 10 would upload the video that they want to use for
  - 11 their ad.
  - 12 Q. (By Ms. Weaver) And Facebook then takes
  - 13 the video and provides that video to the user; is
  - 14 that right on its platform?
- 05:40:31 15 A. As in the case of all ads, it then enters
  - 16 the auction and if it wins the auction we will show
  - 17 that ad that has the video content in our newsfeed
  - 18 to users.
  - 19 Q. So Facebook is isn't creating the videos;
- 05:40:46 20 is that right?
  - 21 A. The advertiser selects the individual use
  - 22 and creates the video.
  - 23 O. And then Facebook's responsibility is to
  - 24 take the video and provide it to the user; is that
- 05:40:58 25 right?

- 05:41:00 1 MR. BENJAMIN: Objection to form.
  - 2 THE DEPONENT: We deliver the ad to
  - 3 users, yes.
  - 4 Q. (By Ms. Weaver) And the ad is in video
- 05:41:06 5 form, right?
  - 6 MR. BENJAMIN: Objection to form.
  - 7 THE DEPONENT: By -- by video form which
  - 8 just mean it is am ad that has a video in it.
  - 9 Q. (By Ms. Weaver) Yes.
- 05:41:18 10 A. Yes then we show a user that ad which
  - 11 involves showing them the video.
  - 12 Q. And then does Facebook report back to the
  - 13 advertiser information about whether or not those
  - 14 video were obtain or received?
- 05:41:42 15 MR. BENJAMIN: Objection to form.
  - 16 THE DEPONENT: Do you mind clarifying
  - 17 what you mean by obtained or received.
  - 18 Q. (By Ms. Weaver) Do you understand what
  - 19 the word obtained means?
- 05:41:50 20 A. I understood to -- I -- I understood it
  - 21 to mean removing it from the platform and I don't
  - 22 think that's what you mean so I want to be sure.

- 23 Q. Okay.
- 24 A. I'm following.
- 05:42:01 25 Q. Let's try this what about receive. Do

- 05:42:04 1 you know what receive means?
  - 2 A. Receive bide the users.
  - Q. Yes.
  - 4 A. Yes the users -- so again the ad enters
- 05:42:12 5 the ad auction if it is delivered to a user the
  - 6 user will see it that's what I'm defining as
  - 7 receive they saw the ad.
  - 8 Q. And then Facebook reports the view of
  - 9 that video back to the advertiser; is that correct?
- 05:42:26 10 A. We report the aggregated number of views
  - 11 of video a video ad gets correct.
  - 12 Q. Okay. What is audience network?
  - 13 A. Audience network was -- was effectively
  - 14 an ad exchange owned by Facebook would enable us to
- 05:42:49 15 place an ad on third-party sites and websites --
  - 16 third parties's websites and apps.
  - 17 Q. And Facebook was placing the ad on the
  - 18 third party websites and was it then compensated
  - 19 for placing the ad?

- 05:43:14 20 MR. BENJAMIN: Objection to form.
  - 21 THE DEPONENT: All with all ads the
  - 22 advertisers pays for the ad and that was also true
  - 23 with audience network placements.
  - Q. (By Ms. Weaver) And in this case, the
- 05:43:23 25 advertiser is Facebook; is that right?

- 05:43:26 1 A. No.
  - 2 MR. BENJAMIN: Objection to form.
  - Q. (By Ms. Weaver) Okay. Facebook is
  - 4 placing the ad on behalf of an advertiser; is that
- 05:43:34 5 right?
  - 6 MR. BENJAMIN: Objection to form.
  - 7 THE DEPONENT: It's a similar concept as
  - 8 placing an ad on Facebook, the advertiser creates
  - 9 the ad and chooses the audience. Facebook dis--
- 05:43:50 10 on -- on our platform we display it here we send it
  - 11 to a publisher so the website or app and they
  - 12 display the ad.
  - 13 Q. (By Ms. Weaver) So is Facebook involved
  - 14 in pulling together targeted interests or behaviors
- 05:44:11 15 for the creation of ads in audience network?
  - 16 A. No.

- 17 MR. BENJAMIN: Objection -- sorry to
- 18 Bella objection to form. Compound. Vague.
- 19 THE DEPONENT: No, the creation of an ad
- 05:44:26 20 that goes on an audience network is the same of
  - 21 creation of an ad on Facebook. The advertiser
  - 22 selects their desired audience through our
  - 23 targeting options the same ones that we covered.
  - 24 The -- our role in the audience network portion is
- 05:44:44 25 in plays -- is in -- is in -- I think placing is

- 05:44:49 1 maybe confusing us. Is in -- that ad going to a
  - 2 third party website rather than on our platform to
  - 3 be displayed to a user.
  - 4 Q. (By Ms. Weaver) And then does Facebook
- 05:45:01 5 track performance measurements and report that back
  - 6 to the advertiser?
  - 7 MR. BENJAMIN: Objection to form.
  - 8 THE DEPONENT: Similar to an ad that we
  - 9 display on -- site and advertiser would know the
- 05:45:16 10 aggregate performance metric of that ad.
  - 11 Q. (By Ms. Weaver) Are you aware of
  - 12 performance measurements provided to sales force at
  - 13 Oracle that were different than the kinds of

- 14 performance measurements provided orderly to -- to
- 05:45:35 15 advertisers?
  - MR. BENJAMIN: Objection to form.
  - 17 THE DEPONENT: In the -- can you clarify
  - 18 in the sense of like Salesforce and/or detail
  - 19 advertisers.
- - 21 A. And did we provide them with different
  - 22 metrics.
  - 23 Q. Yes.
  - 24 A. No.
- 05:46:22 25 Q. Over time with regard to the performance

- 05:46:25 1 metric provided by Facebook to advertisers, what
  - 2 are examples of metrics that are provided today
  - 3 that were not provided in the past?
  - 4 A. As an example, I am sorry Matt I keep
- 05:46:45 5 jumping.
  - 6 When a new ad format is introduced such
  - 7 as video ads were not a type of ad that we had
  - 8 originally -- also showed the relevant performance
  - 9 metric of like aggregate views of that video, which
- 05:47:05 10 wouldn't haven't existed prior to a video ad.

- 11 Q. Can you think of other examples that were
- 12 ad added our time with regard to performance
- 13 measurements or metrics provided to advertisers?
- 14 MR. BENJAMIN: Objection to form.
- 05:47:20 15 THE DEPONENT: Ad score is example that
  - 16 has been something that we have ad had in over
  - 17 time.
  - 18 Q. (By Ms. Weaver) When ad score added?
  - 19 A. I don't know the exact date. But from
- 05:47:33 20 2016 onwards I believe.
  - Q. Any other examples you can think of?
  - 22 A. I can't think of any other examples more
  - 23 specifically on a timeline.
  - Q. What is conversion tracking?
- 05:47:57 25 A. Conversion tracking is way to understand

- 05:48:00 1 who subsequently bought an ad or -- or converted
  - 2 on -- on the product.
  - 3 Q. Does Facebook provide that information to
  - 4 advertisers?
- 05:48:14 5 A. That works in conjunction with our
  - 6 business tools.
  - 7 Q. Okay. Does Facebook provide that

- 8 information to advertisers through their business
- 9 tools?
- 05:48:25 10 A. We -- so for an ad that's -- that's a
  - 11 conversion ad, an advertiser sets up the pixel and
  - 12 they are able to understand and the conversions
  - 13 from that ad.
  - 14 Q. And when you say "the advertiser sets up
- 05:48:43 15 the pixel" do you mean to imply that's the
  - 16 advertiser that is tracking the conversion for is
  - 17 it?
  - 18 A. Yes.
  - 19 Q. Is just as well through the pixel?
- 05:48:56 20 MR. BENJAMIN: Objection to form.
  - 21 THE DEPONENT: The advertiser sets up the
  - 22 pixel Facebook also receives the information from
  - 23 the pixel.
  - Q. (By Ms. Weaver) What specifically the
- 05:49:09 25 information that the pixel selects with regard to

- 05:49:11 1 conversion tracking?
  - 2 A. Pixel collects two categories of
  - 3 information 11 is contact information which is form
  - 4 of identifier. And event the event that something

- 05:49:27 5 is advertiser design in this case conversion and
  - 6 they choose the version to send back about that
  - 7 event.
  - 8 Q. And for the record, can you define
  - 9 conversion?
- 05:49:41 10 A. Conversion is -- is -- the end of
  - 11 the marketing funnel it's when someone buys the
  - 12 product or service being advertised.
  - 13 Q. Is -- is it always a public chair can
  - 14 also be just a desired action?
- 05:50:03 15 MR. BENJAMIN: Objection to form.
  - 16 THE DEPONENT: Desired action is
  - 17 particularly broad because advertiser having
  - 18 desired axe with any ad they are placing, so in the
  - 19 sense of you create an ad with alike page objective
- 05:50:18 20 to try and get people to like your page. So -- are
  - 21 more closely to take a very specific like buying
  - 22 or -- or -- or it is the -- the end of the
  - 23 funnel that someone has completed the marketing
  - 24 funnel.
- 05:50:39 25 Q. (By Ms. Weaver) So we a conversion a

- 2 MR. BENJAMIN: Objection to form.
- 3 THE DEPONENT: I don't think inaccurate I
- 4 don't know -- exactly how we would describe but
- 05:51:00 5 that -- that -- I'm fine with that description.
  - 6 Q. (By Ms. Weaver) Okay. Are you familiar
  - 7 with something called an ad console?
  - 8 A. No, not -- not immediately. Do you mind
  - 9 walking through what your reference is.
- 05:51:24 10 Q. Yeah. Is there something internally that
  - 11 the advertising team sees about ad came paints that
  - 12 is not provided to the advertiser?
  - 13 MR. BENJAMIN: Objection to form and
  - 14 scope.
- 05:51:43 15 THE DEPONENT: An advertising team being
  - 16 like the sales team associated with an advertiser.
  - 17 Or.
  - 18 Q. Yes.
  - 19 A. I -- there are internal tools that are
- 05:52:01 20 sales team uses. I do not -- I don't know if
  - 21 that's specifically ad console that -- that is
  - 22 what -- if that's what it is named CHECK/CHECK.
  - Q. Okay. What is an ECTR?
  - 24 A. The estimated click-through rate.
- 05:52:23 25 Q. And how is that calculated?

- 05:52:29 1 A. The ECTR is part of the machine learning
  - 2 the estimated action rate that's a similar concept
  - 3 so it's the likelihood -- I am sorry one moment. I
  - 4 want to be sure I'm also not confusing acronyms
- 05:52:50 5 here.
  - 6 MS. WEAVER: No problem.
  - 7 THE DEPONENT: I -- I apologize I don't
  - 8 want to definition on the definition of how we
  - 9 create the estimated click-through rate.
- 05:53:12 10 Q. (By Ms. Weaver) Who would know?
  - 11 A. Our ad measurement team would know.
  - 12 O. Who is the -- in the ad measurement team?
  - 13 A. An example is Toby Roessingh.
  - 14 Q. ROSING?
- 05:53:33 15 A. It's -- his last name one second. I can
  - 16 spell this.
  - 17 A. ROESSINGH.
  - 18 O. Is the lead on the ad measurement team?
  - 19 MR. BENJAMIN: Objection to form and
- 05:54:04 20 scope.
  - 21 THE DEPONENT: I'm not sure his exact
  - 22 position but he's on ad measurement.
  - Q. (By Ms. Weaver) Anyone else you can

24 think of?

05:54:16 25 MR. BENJAMIN: Same objection.

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- 05:54:18 1 THE DEPONENT: No, he's -- he's a point
  - 2 of contact that -- that I use for the ads's
  - 3 measurement team.
  - 4 Q. (By Ms. Weaver) Okay. What is CPC?
- 05:54:35 5 A. Cost per click.
  - 6 Q. And what is CPM?
  - 7 A. CPM stands for cost per meal which is
  - 8 cost per 1,000 impressions.
  - 9 Q. And does Facebook provide to advertiser
- 05:54:54 10 following a campaign the metrics that include
  - 11 clicks impressions CPM, CPC and CTR?
  - 12 A. Do you mean for -- those -- those
  - 13 aggregated metrics that we provide to advertisers.
  - 14 Q. Does Facebook also provide revenue
- 05:55:15 15 information?
  - 16 THE DEPONENT: Revenue is -- our like
  - 17 related to us we provide the advertiser with ad
  - 18 spend how much they spend on that ad.
  - 19 Q. (By Ms. Weaver) And then does Facebook
- 05:55:31 20 provide something called value to advertisers?

- 21 A. We do provide a metric called value.
- Q. And what is value?
- 23 A. How we calculate value is something that
- 24 I -- I'm afraid I will -- will misrepresent.
- 05:56:01 25 Q. But Facebook does calculate value, right?

- 05:56:08 1 A. We so --
  - 2 MR. BENJAMIN: Objection -- objection to
  - 3 form.
  - 4 THE DEPONENT: We provide a metric called
- 05:56:14 5 or part of performance is -- is a metric called
  - 6 value.
  - 7 Q. (By Ms. Weaver) And it's the value of
  - 8 what?
  - 9 A. I'm not certain and I don't want to
- 05:56:25 10 misrepresent what it stands for.
  - 11 Q. Who would know?
  - 12 A. Again Toby.
  - Q. What is ego value? EGO value egO.
  - 14 Value.
- 05:56:45 15 THE DEPONENT: I'm not certain. I --
  - 16 I -- I -- I'm not familiar with that this yeah.
  - 17 Q. (By Ms. Weaver) Does Facebook provide

- 18 real time ads metrics to advertisers?
- MR. BENJAMIN: Objection to form.
- 05:57:08 20 THE DEPONENT: Can you clarify for real
  - 21 time do you mean as soon as an action happens on an
  - 22 ad?
  - 23 Q. (By Ms. Weaver) I mean, I -- I don't
  - 24 know I don't work at Facebook. But what is real
- 05:57:19 25 time mean at Facebook?

- 05:57:23 1 MR. BENJAMIN: Objection to form.
  - THE DEPONENT: So we provide as an ad
  - 3 begins to run we provide the aggregated metrics
  - 4 performance metrics those aren't like a minute by
- 05:57:39 5 minute updated, so it's that's what we mean by real
  - 6 time it's -- it's not how those metrics are shared
  - 7 with advertisers.
  - 8 Q. (By Ms. Weaver) How about five minute
  - 9 level granularity is that shared with advertisers?
- 05:58:03 10 A. I don't know the exact refresh rate of
  - 11 those aggregated metrics.
  - 12





- 13 Q. (By Ms. Weaver) Okay. What are QRT
- 14 experiments?
- 05:59:58 15 A. Those aren't specific to -- to ads a QRT
  - 16 is to effectively understand the change when we
  - 17 launch something so if we see as an example we
  - 18 might -- I'm trying -- probably silly am example.
  - 19 In ads manager we switched the order of nothing we
- 06:00:24 20 might run a QRT where some advertisers are in one
  - 21 group and other advertisers are in other group to
  - 22 understand if there is a difference between the --
  - 23 the groups and the UIs to understand if there's an
  - 24 impact to how they engage with our tools.
- 06:00:41 25 Q. And what is QRT stand for, do you know?

- 06:00:48 1 A. I don't know.
  - 2 MR. BENJAMIN: Objection to form and
  - 3 scope.
  - 4 THE DEPONENT: This is probably a -- a
- 06:00:53 5 problem at Facebook where we were -- without ever
  - 6 learning the -- the fallboarding I'm not sure. I'm
  - 7 not sure what the full name is or what it stands
  - 8 for.

9 (By Ms. Weaver) So do QRT experiments Q. generates ads specific metrics that are useful to 06:01:08 10 Facebook in figuring out how best to target users? 12 MR. BENJAMIN: Objection to form. 13 THE DEPONENT: No, a QRT is about creating -- like a production environment that we can understand if it's different from different 06:01:33 15 production environment. It's not a method to 16 17 target users for ads. That is still established by 18 our targeting tools that advertisers choose. 19 (By Ms. Weaver) What a -- what's a Q. 06:01:53 20 production environment? MR. BENJAMIN: Objection. 21 22 Is anyone else hearing a echo? 23 THE COURT REPORTER: Yes. 24 MS. WEAVER: I'm hearing an echo too.

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MR. BENJAMIN: Do we do want to go off

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06:02:12 1 the record.

06:02:11 25

- 2 THE COURT REPORTER: Sure.
- 3 MS. WEAVER: I want to continue with dep;
- 4 do you have -- do we to he have.
- 06:02:22 5 THE DEPONENT: 18 minutes. Is it on my

- 6 own if I mute does that help.
- 7 (Discussion off the stenographic record.)
- 8 Q. Okay. Back what is production
- 9 environment.
- 06:03:33 10 A. That was my way of explaining that we
  - 11 created two versions of a UI for users who -- who
  - 12 are in this -- in the example I gave advertisers to
  - 13 interact with it's just a -- a life part of our
  - 14 site. I'm not sure if like a technical term that
- 06:03:53 15 would be used but that's what I was describing.
  - 16 Q. Are you familiar with something called
  - 17 deltoid?
  - 18 MR. BENJAMIN: Objection to form.
  - 19 THE DEPONENT: Not super specific to ad
- 06:04:08 20 targeting or ad ranking. Deltoid from my
  - 21 understanding is low we help measure when a.
  - 22 THE DEPONENT: RT is running the
  - 23 differences in metrics from that effectively those
  - 24 two environments the two versions that that we have
- 06:04:28 25 running.

- 06:04:29 1 Q. (By Ms. Weaver) And what do you mean by
  - 2 the differences in metrics?

- A. So going back to the example of that I
- 4 was using of advertiser maybe we switched the. I
- 06:04:40 5 in one version to understand if it's an easier UI
  - 6 or them to use. I mean one thing would be like ad
  - 7 creation do we see similar rates of ad creation
  - 8 when we make that change.
  - 9 0. Got it.
- 06:05:02 10 So does Facebook provide to third parties
  - 11 ad market daily metrics?
  - MR. BENJAMIN: Objection to form to.
  - 13 Q. (By Ms. Weaver) Know is that something
  - 14 that Facebook maintains internally sorry that about
- 06:05:15 15 Matt?
  - MR. BENJAMIN: Excuse me Ms. Weaver
  - 17 apologize.
  - 18 Objection to form and scope.
  - 19 THE DEPONENT: I am sorry I missed the
- 06:05:24 20 very beginning of your question.
  - Q. (By Ms. Weaver) Does Facebook provide to
  - 22 third parties ad market daily metrics?
  - MR. BENJAMIN: Same objections.
  - 24 THE DEPONENT: No my understanding is
- 06:05:42 25 that that's an internal table of -- of ad

- 06:05:48 1 performance and metrics.
  - Q. (By Ms. Weaver) And does Facebook
  - 3 maintain per impression logging with revenue
  - 4 information for ads?
- 06:06:03 5 MR. BENJAMIN: Objection to form.
  - 6 THE DEPONENT: we maintain
  - 7 something called ads impressions annotated which is
  - 8 an impression login table to be clear. I don't
  - 9 think it's revenue based. Revenue again is more
- 06:06:19 10 specific to us rather than ad spend from the
  - 11 advertiser.
  - 12 Q. (By Ms. Weaver) And does Facebook share
  - 13 data from the ads impressions annotated with third
  - 14 parties?
- 06:06:38 15 MR. BENJAMIN: Objection to form and
  - 16 scope as phrased.
  - 17 THE DEPONENT: No, we share the
  - 18 aggregated impression information in like our --
  - 19 our ads manager performance metrics not the table.
- 06:06:51 20 Q. (By Ms. Weaver) And where is that
  - 21 aggregated impressions information maintained at
  - 22 Facebook?
  - 23 MR. BENJAMIN: Objection to form and
  - 24 scope.

06:07:04 25 THE DEPONENT: It's read from our data

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- 06:07:07 1 basis it's read from the tables but aggregated for
  - 2 to desired audience play to -- in our UI.
  - 3 Q. (By Ms. Weaver) I am sorry.
  - 4 A. No, no.
- 06:07:18 5 Q. You said read from databases which
  - 6 databases do you mean specifically?
  - 7 A. The -- the back end here, I -- I were --
  - 8 this isn't specific to ads, I'm not -- I'm not sure
  - 9 if like our ads reporting UI reads it
- 06:07:44 10 specifically in which case it would be the ads
  - 11 impressions annotated or
  - is where like the production site is
  - 13 run from.
  - 14 Q. Is there data which is
- 06:08:12 15 shared with third parties?
  - 16 MR. BENJAMIN: Objection to form and
  - 17 scope.
  - 18 THE DEPONENT: Can you -- do you mind --
  - 19 collar -- clarify do you mean such as like the
- 06:08:30 20 tables ?
  - Q. (By Ms. Weaver) Yes.

- MR. BENJAMIN: Same objection.
- 23 THE DEPONENT: So within the context of
- 24 ads we don't share the tables with third

06:08:42 25 parties.

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- 06:08:44 1 Q. (By Ms. Weaver) Which share information
  - 2 contained in the tables some -- some
  - 3 portion of it with advertisers?
  - 4 MR. BENJAMIN: Objection to form. Asked
- 06:08:55 5 and answered.
  - 6 THE DEPONENT: Our ad reporting metrics
  - 7 the one we discussed the aggregated ones such as in
  - 8 ads manager I'm not certain if those come
  - 9 if that's an age gender that's there but were
- 06:09:14 10 example where conceptually that might happen. But,
  - 11 again, it's about -- it's backing the aggregated
  - 12 metrics that we provide to an advertiser.
  - Q. (By Ms. Weaver) What's the difference
  - 14 between a raw and a legal impression?
- 06:09:30 15 MR. BENJAMIN: Objection to form and
  - 16 scope.
  - 17 THE DEPONENT: A legal impression is an
  - 18 impression that we -- that is targeted ad had to

- 19 the advertiser a raw impression is not always a
- 06:09:48 20 legal impression.
  - Q. (By Ms. Weaver) How does Facebook decide
  - 22 what is a legal impression?
  - 23 MR. BENJAMIN: Objection to form and
  - 24 scope.
- 06:09:58 25 THE DEPONENT: This -- this is within ads

- 06:10:00 1 measurement an example from -- from my knowledge is
  - 2 if we -- if we show an an ad multiple -- if an
  - 3 ad -- I am trying to explain how -- how I remember
  - 4 this.
- 06:10:28 5 If -- if an example of a raw impression
  - 6 is that does -- is not a legal impression because
  - 7 legal impressions a subset of those, would be if an
  - 8 ad is shown to a user potentially repeatedly and it
  - 9 was not -- it wasn't supposed to be so it's -- if
- 06:10:48 10 an indication of potentially like a miss delivery
  - 11 on our side so we don't charge the advertiser for
  - 12 it.
  - Beyond that I, don't know all the cases
  - 14 and that would be something that our ads
- 06:10:59 15 measurement would cover.

- 16 Q. (By Ms. Weaver) Are you aware of a table
- 17 that logs per user daily key revenue metrics with
- 18 ads revenue?
- 19 MR. BENJAMIN: Objection to form and
- 06:11:12 20 scope.
  - THE DEPONENT: No.
  - Q. (By Ms. Weaver) So you are familiar with
  - 23 a log called

?

06:11:26 25 MR. BENJAMIN: Same objections.

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- 06:11:31 1 THE DEPONENT: I'm -- I'm not familiar
  - 2 with all of data in that table or if it reflects
  - 3 revenue per user that's not something we calculate.
  - 4 Q. (By Ms. Weaver) Do you know if -- are
- 06:11:50 5 you familiar with a

- 8 CHECK/CHECK?
- 9 MR. BENJAMIN: Objection to form and
- 06:12:05 10 found and scope.
  - 11 THE DEPONENT: I don't know the details
  - 12 of the columns of that

- 13 Q. (By Ms. Weaver) Is there a person who is
- 14 responsibility is to track revenue tied on a user
- 06:12:19 15 basis no, we don't track revenue on a user basis.
  - 16 Q. You said we don't you mean currently
  - 17 Facebook doesn't do that?
  - 18 MR. BENJAMIN: Objection to form and
  - 19 scope on this line.
- 06:12:50 20 THE DEPONENT: We don't track per user
  - 21 how much -- the revenue we've gain from that user
  - 22 is what I mean.
  - Q. (By Ms. Weaver) Okay. With regard to
  - 24 conversions are you familiar with something called
- 06:13:07 25 an RSVP?

- 06:13:12 1 MR. BENJAMIN: To scope.
  - 2 THE DEPONENT: No I might need some --
  - 3 some narrowing or clarification.
  - 4 Q. (By Ms. Weaver) Sadly, I don't have any.
- 06:13:34 5 MS. WEAVER: Okay I think we go off the
  - 6 record quickly how much time do we have left.
  - 7 THE VIDEOGRAPHER: Let's see -- off the
  - 8 record we about seven or eight minutes left.
  - 9 MS. WEAVER: Great. Thank you.

- 06:13:52 10 THE VIDEOGRAPHER: Okay. We are off the
  - 11 record it's 6:13 p.m.
  - 12 (Recess taken.)
  - 13 THE VIDEOGRAPHER: We are back on record
  - 14 it's 6:28 p.m.
- 06:28:11 15 Q. (By Ms. Weaver) Ms. Leone just a -- or
  - 16 Ms. Leone just a few more questions. You testified
  - 17 the CPC is metric that refers to cost per click.
  - 18 Do you recall that?
  - 19 A. Yes.
- 06:28:23 20 Q. Can it also?
  - 21 MS. WEAVER: You know, it sound like this
  - 22 echo is me let me try.
  - 23 Can you refer --
  - A. I am sorry, that came in and out
- 06:28:41 25 continuously.

- 06:28:45 1 MS. WEAVER: Hello, I just want back to
  - 2 the other Mike.
  - Q. Okay. Can CPC also refer to a type of
  - 4 bidding that advertisers can choose where they pay
- 06:28:54 5 each time a user clicks on the ad?
  - 6 A. It is abiding strategy that they can

- 7 select when they set up their ad.
- 8 O. And is reach the number of users who
- 9 research an ad?
- 06:29:14 10 A. Reach is the number of accounts that --
  - 11 that -- that see an ad, yes. I think that were we
  - 12 are saying the same thing.
  - 13 Q. And unique accounts?
  - 14 A. Unique accounts.
- 06:29:25 15 Q. What is frequency?
  - 16 A. Together reach and frequency are a type
  - 17 of a membership of brand awareness of we we will
  - 18 try to -- to -- to optimize the ad to reach a large
  - 19 number of people or reach many people and multiple
- 06:29:50 20 times with an ad so they familiarize yourself with
  - 21 that brand.
  - Q. So is reach frequency a number of times a
  - 23 user is exposed to an ad?
  - 24 A. Yes.
- 06:30:03 25 Q. And is average frequency calculated by

- 06:30:06 1 dividing impressions by reach?
  - 2 A. I believe so. But I -- I would be
  - 3 potentially need to to -- to confirm.

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MS. WEAVER: Okay. That's it I have no
06:30:25 5 further questions at this time and reserve all
            rights and on behalf of plaintiffs.
          7
                      MR. BENJAMIN: Okay. Thank you for
            Counsel Weaver on behalf of Facebook like to have
            an opportunity to ask the questions wanted to today
06:30:38 10
            we just reserve all rights.
                      Transcript confidentiality pursuant to
        11
        12
            the pending the final confidential's designation.
        13
                      MS. WEAVER: Great. Thank you. We can
            go off the record.
        14
06:30:50 15
                      THE VIDEOGRAPHER: We are -- do you want
            to go off the record. I am sorry I didn't hear.
        16
        17
                      MS. WEAVER: We can go off.
                      THE VIDEOGRAPHER: Off the record. Thank
        18
        19
            you. We are off the record. It's 6:31 p.m.
        20
        21
        22
        23
        24
        25
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